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MEPA/NEPA/HB495 CHECKLIST

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PART I. PROPOSED ACTION DESCRIPTION

1. **Type of Proposed State Action:**

With the publication of the Environmental Assessment and Management plan for Thompson Chain of Lakes (TCL), it was agreed that a more intensive recreation site inventory and a planning system for site specific recommendations was necessary. The inventory was necessary to establish existing conditions, and to assist in making recommendations in conjunction with public comments to help direct future management actions. The planning model selected is the Limits of Acceptable Change System.

Issues and concerns that were identified in the management plan include sanitation, water quality, recreation use, access/roads, vegetation management, boating, wildlife, and livestock grazing. The general management philosophy directing the area is to "leave the area as it is". This philosophy is reflected in all the options considered in this assessment.

Three alternatives were selected to address these issues. They include:

Option I, No Action: Leave site in existing condition. No development of facilities, impose no limits on the number of campsites that can be pioneered, impose no regulation.

Option II: Develop 5 Sites: This management option follows the recommendation in the TCL Management Plan, i.e., the camping resources is designed to retain the dispersed opportunities for recreational vehicle users. Campsite upgrades will take place at Loon Lake, the peninsula, the bridge at Upper Thompson, Horseshoe Lake, and the east end of McGregor Lake. Toilets will be provided at other locations, but no other development will take place. Please see complete recommendation in the TCL Management Plan and Environmental Assessment, Pages 1 - 3. This is included in this document as Attachment A.

In addition to the above, a set carrying capacity is established for each site, and management decisions established for when these capacities are exceeded. See Attachment B, page 14 for complete site specific recommendations on Option II.

Option III: Diverse Recreational Opportunity: This option provides a more diverse spectrum of recreation management opportunities. Some sites would be closed, other sites restricted to boat-in or walk-in access. A set carrying capacity is established, and management options established for when these capacities are exceeded. See Attachment B, page 16 for complete site specific recommendations on Option III.

Details of all three of these options are in Attachment B.

2. **Agency Authority for the Proposed Action** Fish, Wildlife & Parks

3. **Name of Project** Thompson Chain of Lakes

4. **Name, Address and Phone Number of Project Sponsor (if other than the agency)**

5. **If Applicable:**

Estimated Construction/Commencement Date: Summer, 1995 for toilets, Spring, 1996 for larger projects

Estimated Completion Date: Spring, 1997

Current Status of Project Design (% complete): 50%

6. **Location Affected by Proposed Action (county, range and township)**

Please see Attachment C: Appendix G, Exhibit A, Thompson Chain of Lakes Management Plan and Environmental Assessment

7. **Project Size: Estimate the number of acres that would be directly affected that are currently:**

(a) Developed:
residential . . . . . __ acres
industrial . . . . . __ acres

(b) Open Space/Woodlands/
Recreation . 4,000 acres

(c) Wetlands/Riparian
Areas . . . . . __ acres

(d) Floodplain . . . . . __ acres

(e) Productive:
irrigated cropland . . . . . __ acres
dry cropland . . . . . __ acres
forestry . . . . . __ acres
rangeland . . . . . __ acres
other . . . . . __ acres

8. **Map/site plan: attach an original 8 1/2" x 11" or larger section of the most recent USGS 7.5' series topographic map showing the location and boundaries of the area that would be affected by the proposed action. A different map scale may be substituted if more appropriate or if required by agency rule. If available, a site plan should also be attached.**

See Attachment D.

Rev. 9. **Narrative Summary of the Proposed Action or Project including the Benefits and Purpose of the Proposed Action.**

The purpose of the proposed action is to provide an inventory of the currently existing conditions at Thompson Chain of Lakes, and to establish a system for monitoring existing conditions, and making management decisions when these conditions change. The final outcome of this process is to determine site specific recommendations for the Chain of Lakes area, which would limit the increasing use of this area, while continuing to provide dispersed recreation with a minimum of visual controls. The format used to do this is the Limits of Acceptable Change model. Seven recreational opportunity classes were established, and the current sites were inventoried and mapped, and placed into the classification system. Upon completion of this inventory, three management options for continued operational condition of these sites were established. Please See Attachment B for complete mapping of this area, and a detailed narrative of the process and procedures used.

As facilities increase in this area, even facilities limited to boat ramps and toilets, maintenance costs will increase for supplies, repairs, travel, and manpower. Recreational control to prevent continued pioneering of new campsites, and to monitor the use of campfires can be done with physical barriers or through the use of personnel. While the Thompson Chain of Lakes Management Plan and Environmental Assessment States "Because fiscal constraints will continue to be a concern, the plan developed for TCL must emphasize capital improvements and operations methods which minimize staffing and maintenance needs and costs", it has been the direction taken by the TCL Oversight Committee, that staffing was preferable to designed barriers in controlling usage and directing use to appropriate channels. Therefore, personnel costs will be a major factor in the management of TCL. Please see Attachment E for cost estimates for development and management in Options II and III.

One management option to control maintenance costs will be an "Adopt-a-Site" program. Service organizations in Libby and Kalispell will be contacted to see if they will adopt a specific site. A sign would be erected stating that they had adopted that site, and the club or service organization would be responsible for keeping the site clean, routine maintenance, and notifying the agency if resource or enforcement problems were occurring. While this will reduce the maintenance costs for the area, personnel will still be needed for enforcement and site monitoring.

Additional evaluations need to be completed in the TCL area. These assessments were committed to in the TCL Management Plan and Environmental Assessment. They include:

- Continuing investigation of the opportunities for land trades to solidify holding along the lakeshores of TCL.
- Road inventories to determine existing roads and road conditions.
- Enforcement plan
- Loon nest management plan
- Eagle management plan
- Wildlife management plan
- Fisheries management plan - will be out for public review shortly.
- Grazing and Timber management plans

10. **Listing of any other Local, State or Federal agency that has overlapping or additional jurisdiction.**

(a) Permits:

Agency Name	Permit	Date Filed/#

Permits that may be required include:

Stream Preservation Permit
Lake Shore Protection Permit
Flood Plain Permit
Storm Runoff Permit
Wetlands Permit
Health and Sanitation Review and Permit
Road Approach Permits
County Weed Permit
State Historic Preservation Office Permit
Health and Sanitation Reviews and Permits

(b) Funding:

Agency Name	Funding Amount
Fish, Wildlife & Parks	$150,000
Dingle Johnson Funds	$300,000

(c) Other Overlapping or Additional Jurisdictional Responsibilities:

Agency Name	Type of Responsibility

The Department of Health and Environmental Sciences has specific regulations regarding the availability of water and sanitation in a camping area. The Thompson Chain of Lakes does not meet the current Health Department Regulations as to availability of sanitary facilities or water. (Please see Appendix B in the Thompson Chain of Lakes Management Plan and Environmental Assessment, or Tourist Campgrounds Rules ARM 16.10.700). The regulations currently state that a watering station is required in each tourist campground or trailer court. Additionally a toilet is required within 300 feet of each campsite. The regulations for the Department of Health and Environmental Sciences regulations are currently being rewritten, and FWP has been active in supplying comments on this rewrite. The Health Department has informed FWP that TCL will be grandfathered in with the current conditions as to water and toilet facilities. If this happens, we will be legally in compliance with health department regulations.

Additional jurisdictions are held by the Flathead and Lincoln County Health Departments, County Lakeshore protection and streambed protection boards, and County Sanitation boards.

11. **List of Agencies Consulted During Preparation of the EA:**

The following agencies were sent a copy of the Draft EA:

Environmental Quality Council
Department of Health and Environmental Sciences
Montana Historical Society
Montana State Library
Montana Environmental Information Center
Flathead Regional Development Office

PART II. ENVIRONMENTAL REVIEW

PHYSICAL ENVIRONMENT

1. LAND RESOURCES Will the proposed action result in:	IMPACT ☼				Can Impact Be Mitigated ☼	Comment Index
	Unknown ☼	None	Minor ☼	Potentially Significant		
► a. Soil instability or changes in geologic substructure?		X				
b. Disruption, displacement, erosion, compaction, moisture loss, or over-covering of soil which would reduce productivity or fertility?			X			
► c. Destruction, covering or modification of any unique geologic or physical features?		X				
d. Changes in siltation, deposition or erosion patterns that may modify the channel of a river or stream or the bed or shore of a lake?		X				
e. Exposure of people or property to earthquakes, landslides, ground failure, or other natural hazard?		X				
f. Other _____						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

1.b. Option I will continue to allow disruption, displacement, erosion, compaction, moisture loss and loss of over-covering of soil due to continued use and pioneering of new sites. Additionally erosion would increase with the pioneering of additional user made boat ramps in the various lakes.

Options II and III will limit the increase in pioneered sites, which will decrease the current rate of soil compaction and erosion. In addition, Options II or III should decrease the amount of soil compaction and erosion that is currently occurring due to the placement of boat ramps in appropriate locations, (with concrete boat ramps placed in heavy use areas), and the removal of boat ramps that are now being pushed into the lakes at random locations. By reducing the number of ramps, soil compaction and erosion should be decreased. Also in Options II and III, five sites are designed to accommodate additional use, and developed to a level that erosion and runoff should be reduced. Option III would be more beneficial than Option II in retaining soil cover and preventing erosion as some sites are closed, and others are made walk in or boat in, thus reducing damage from roading.

☼ Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or can not be evaluated.

► Include a narrative description addressing the items identified in 12.8.604-1a (ARM)

♦ Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

♦♦ Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

PHYSICAL ENVIRONMENT

2. AIR Will the proposed action result in:	IMPACT☼				Can Impact Be Mitigated☼	Comment Index
	Unknown☼	None	Minor☼	Potentially Significant		
▶ a. Emission of air pollutants or deterioration of ambient air quality? (also see 13 (c))			X			
b. Creation of objectionable odors?		X				
c. Alteration of air movement, moisture, or temperature patterns or any change in climate, either locally or regionally?		X				
d. Adverse effects on vegetation, including crops, due to increased emissions of pollutants?		X				
e. ♦ For P-R/D-J projects, will the project result in any discharge which will conflict with federal or state air quality regs? (Also see 2a)		X				
f. Other _____						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Air Resources (Attach additional pages of narrative if needed):

2.a. Currently campfires are used throughout the Chain of Lakes area. Under Option I, the number of sites and hence the number of campfires would increase. With increased site control established in Options II and III, and the reduction in pioneered camps in these options, the number of campfires may be reduced. The danger of wildfires from unattended campfires in a concern in this area. The development of specific sites, and possibly the addition of fire rings in designated areas will reduce this hazard.

☼ Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or can not be evaluated.

▶ Include a narrative description addressing the items identified in 12.8.604-1a (ARM)

♦ Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

♦♦ Include a discussion about the issue in the EA narrative end include documentation if it will be useful.

PHYSICAL ENVIRONMENT

3. WATER Will the proposed action result in:	IMPACT ☼				Can Impact Be Mitigated ☼	Comment Index
	Unknown ☼	None	Minor ☼	Potentially Significant		
► a. Discharge into surface water or any alteration of surface water quality including but not limited to temperature, dissolved oxygen or turbidity?			x			
b. Changes in drainage patterns or the rate and amount of surface runoff?			x			
c. Alteration of the course or magnitude of flood water or other flows?		x				
d. Changes in the amount of surface water in any water body or creation of a new water body?		x				
e. Exposure of people or property to water related hazards such as flooding?		x				
f. Changes in the quality of groundwater?		x				
g. Changes in the quantity of groundwater?		x				
h. Increase in risk of contamination of surface or groundwater?			x			
i. Effects on any existing water right or reservation?		x				
j. Effects on other water users as a result of any alteration in surface or groundwater quality?		x				
k. Effects on other users as a result of any alteration in surface or groundwater quantity?		x				
l. ♦♦ For P-R/D-J, will the project affect a designated floodplain? (Also see 3c)		x				
m. ♦ For P-R/D-J, will the project result in any discharge that will affect federal or state water quality regulations? (Also see 3a)		x				
n. Other: _____						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Water Resources (Attach additional pages of narrative if needed):

3.a. Option I would affect water quality due to increased use without proper sanitary facilities. In addition, increasing numbers of pioneered sites would reduce vegetation, and hence increase erosion which would increase turbidity as that erosion moves into the lakes.

Options II or III would decrease surface runoff from exposed soils that are occurring due to current use patterns. Option III would be more beneficial to maintaining or increasing water quality than Option II. Both Option II or III would provide sanitary facilities and hence protect water quality from improper disposal of waste.

3.b. Option I could impact drainage patterns as more user induced boat ramps are pushed into the various lakes, causing erosion problems. Options II and III would install adequate boat ramps and block off user made ramps.

3.h. Contamination of surface groundwater would occur under Option I due to the lack of sanitary facilities. Options II and III provide sanitary facilities, and so would reduce pollution from this source.

☼ Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or can not be evaluated.

► Include a narrative description addressing the items identified in 12.8.604-1a (ARM)

♦ Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

♦♦ Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

4. VEGETATION Will the proposed action result in:	IMPACT ☼				Can Impact Be Mitigated ☼	Comment Index
	Unknown ☼	None	Minor ☼	Potentially Significant		
a. Changes in the diversity, productivity or abundance of plant species (including trees, shrubs, grass, crops, and aquatic plants)?		x				
b. Alteration of a plant community?		x				
c. Adverse effects on any unique, rare, threatened, or endangered species?		x				
d. Reduction in acreage or productivity of any agricultural land?		x				
e. Establishment or spread of noxious weeds?			x			
f. ♦♦ For P-R/D-J, will the project affect wetlands, or prime and unique farmland?			x			
g. Other: _____						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

4.e. Noxious Weeds are a concern in this area as the number of roads and off road use in the area readily spreads weeds. Both Options II and III would restrict vehicles to established roadways, while Option I would not. A weed management plan for TCL has been incorporated into the Region One Noxious Weed and Exotic Vegetation Management Plan dated December, 1994. Please see Attachment F for selected portions of the Region One Noxious Weed Plan. Neither Option II or III of the proposed alternative will cause a significant difference in the amount of weeds in the area. Option III, by eliminating some sites, will reduce the exposure of some areas to weeds.

4.f. There are wetlands in the TCL area. In Options II or III these areas will be protected for further damage by placing signing and barriers to inhibit off road vehicle use. In Option I, damage will continue to occur in the wetland between Lower and Middle Thompson due to ATV use.

☼ Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or can not be evaluated.

▸ Include a narrative description addressing the items identified in 12.8.604-1a (ARM)

♦ Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

♦♦ Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

PHYSICAL ENVIRONMENT

▸ 5. FISH/WILDLIFE Will the proposed action result in:	IMPACT ☼				Can Impact Be Mitigated ☼	Comment Index
	Unknown ☼	None	Minor ☼	Potentially Significant		
a. Deterioration of critical fish or wildlife habitat?		x				
b. Changes in the diversity or abundance of game animals or bird species?		x				
c. Changes in the diversity or abundance of nongame species?		x				
d. Introduction of new species into an area?		x				
e. Creation of a barrier to the migration or movement of animals?		x				
f. Adverse effects on any unique, rare, threatened, or endangered species?			x			
g. Increase in conditions that stress wildlife populations or limit abundance (including harassment, legal or illegal harvest or other human activity)?			x			
h. ♦♦ For P-R/D-J, will the project be performed in any area in which T&E species are present, and will the project affect any T&E species or their habitat? (Also see 5f)			x			
i. ♦ For P-R/D-J, will the project introduce or export any species not presently or historically occurring in the receiving location? (Also see 5d)		x				
j. Other: _____						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

5.f. The threatened bald eagle and the loon, a species of special concern, exist in the TCL area. Option I will continue to impact these species as the number of campsites and the numbers of recreationists increase. Neither Option II or III will have a significantly different impact on these species. Under Options II and III buoys will be placed around loon nests to protect this species and an informational signing program will begin to educate people regarding the loon's habitat needs.

A bald eagle nest on Horseshoe Lake is of concern. Under the Thompson Chain of Lakes Management Plan and Environmental Assessment it was agreed that this nesting site would be monitored, and if the eagles failed to rear young for three years in a row a eagle nest management plan would be implemented. For a more in depth discussion of threatened and endangered species, and species of special concern please see Attachment G, pages 58-60 of the TCL Management Plan and Environmental Assessment.

5.g. Option I could increase stress on wildlife species as recreational use increases. Both Options II and III will lessen the current stress levels on wildlife in the Thompson Chain of Lakes area. As both options limit the number of sites and users, annually increasing use will be slowed. Option III closes some sites, which will lessen stress on wildlife more than Option II.

5.h. Please see 5.f. above.

☼ Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or can not be evaluated.

▸ Include a narrative description addressing the items identified in 12.8.604-1a (ARM)

♦ Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

♦♦ Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

6. NOISE/ELECTRICAL EFFECTS Will the proposed action result in:	IMPACT ☼				Can Impact Be Mitigated ☼	Comment Index
	Unknown ☼	None	Minor ☼	Potentially Significant		
a. Increases in existing noise levels?			x			
b. Exposure of people to severe or nuisance noise levels?		x				
c. Creation of electrostatic or electromagnetic effects that could be detrimental to human health or property?		x				
d. Interference with radio or television reception and operation?		x				
e. Other: _____						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

6.a. Private landowners are currently impacted by recreational use on the interlocking Chain of Lakes area. Option I, would increase this impact with increased recreational use. Recreationists would also be impacted by increased ATV use and general increase in number of campsites. Options II and III will reduce conflict, with Option III being most sensitive to local lot owners needs.

☼ Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or can not be evaluated.

▸ Include a narrative description addressing the items identified in 12.8.604-1a (ARM)

♦ Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

♦♦ Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

HUMAN ENVIRONMENT

7. LAND USE Will the proposed action result in:	IMPACT ☼				Can Impact Be Mitigated ☼	Comment Index
	Unknown ☼	None	Minor ☼	Potentially Significant		
a. Alteration of or interferance with the productivity or profitability of the existing land use of an area?			x			
b. Conflicted with a designated natural area or area of unusual scientific or educational importance?		x				
c. Conflict with any existing land use whose presence would constrain or potentially prohibit the proposed action?		x				
d. Adverse effects on or relocation of residences?			x			
e. Other: _____						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

7.a. The current land ownership is interlocking timber and grazing land with recreational land and private lot owners. As recreation increases on both Chain of Lakes property and Plum Creek property, management options that would reduce or change this recreational opportunity will meet with growing resistance. Grazing and recreation has experienced some minor conflicts, and will continue to be monitored in the future. Options II and III control use on TCL property, and hence decrease fire danger and use conflicts between private property owners and recreationists. Hence, in this aspect they will have less impact on private lot owners, grazers, and timber companies than Option I. Conversely, because Options II and III control use on TCL property, more and more individuals will use Plum Creek property due to the absence of regulation, and due to the limitations on the availability of sites on TCL. This will become more evident as recreational use increases. This shifting of recreational use patterns may be potentially damaging to Plum Creek properties.

7.d. Uncontrolled use of the TCL property creates conflicts with private lot owners in reference to noise, resource damage, public/private conflicts, and fire danger from uncontrolled campfires. Option I would continue the current unmanaged use. Options II and III would institute some controls on usage, and would reduce conflicts with private lot owners. For Options II or III to work, personnel will be needed to educate and enforce regulations. Without increased patrols, no plan limiting use will be effective.

☼ Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or can not be evaluated.

▸ Include a narrative description addressing the items identified in 12.8.604-1a (ARM)

♦ Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

♦♦ Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

HUMAN ENVIRONMENT

8. RISK/HEALTH HAZARDS Will the proposed action result in:	IMPACT ☼				Can Impact Be Mitigated ☼	Comment Index
	Unknown ☼	None	Minor ☼	Potentially Significant		
a. Risk of an explosion or release of hazardous substances (including, but not limited to oil, pesticides, chemicals, or radiation) in the event of an accident or other forms of disruption?		x				
b. Affect an existing emergency response or emergency evacuation plan or create a need for a new plan?		x				
c. Creation of any human health hazard or potential hazard?			x			
d. ♦ For P-R/D-J, will any chemical toxicants be used? (Also see 8a)		x				
e. Other: _____						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

8.c. The hazard created by unsupervised campfires has been a major concern in this area. Option I will not limit the numbers of pioneered campsites, and will allow increasing numbers of campsites and hence increasing hazards from fire. Options II and III will stop new sites from being pioneered, and will hence limit fires to existing areas which will reduce the opportunity for fires to get into root formations and spread underground. Option III will make some areas walk-in or boat-in, limiting use in some areas, and will eliminate some campsites created since the management decision making process began, thus reducing the opportunity for unsupervised fires. Personnel for patrol is the best alternative for reducing the risk of unsupervised fires, and hence, wildfire.

☼ Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or can not be evaluated.

► Include a narrative description addressing the items identified in 12.8.604-1a (ARM)

♦ Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

♦♦ Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

HUMAN ENVIRONMENT

9. COMMUNITY IMPACT Will the proposed action result in:	IMPACT ☼				Can Impact Be Mitigated ☼	Comment Index
	Unknown ☼	None	Minor ☼	Potentially Significant		
a. Alteration of the location, distribution, density, or growth rate of the human population of an area?			x			
b. Alteration of the social structure of a community?			x			
c. Alteration of the level or distribution of employment or community or personal income?			x			
d. Changes in industrial or commercial activity?			x			
e. Increased traffic hazards or effects on existing transportation facilities or patterns of movement of people and goods?		x				
f. Other: _____						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

9.a. The purpose of this project is to provide a higher quality recreational experience in the TCL area. All alternatives will therefore impact the type and amount of recreational opportunity available. With increased public awareness of the recreational opportunities in this area, market values for private lots in this area will increase.

9.b. With the change in the primary use of the TCL property from timber land to recreational land, changes in the surrounding community will occur. In all Options more recreationists will come to this area, increasing the need for groceries, gasoline, fishing licenses, etc. This increased demand will change the amenities offered in the area.

9.c. As employment is impacted by the change in the use of this property for logging to use for recreation, employment opportunities will change also. All three options will similarly impact the types of jobs available in the immediate TCL area.

9.d. Please see 9.c. above.

9.f. A new highway project is on line for the TCL area. This project will limit the number of turnoffs available to the public from the highway. This will be the same for any option chosen. In addition, a rest area is planned for the TCL area. This will provide additional picnic and restroom facilities for the public traveling in this area, which may slightly change movement patterns.

☼ Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or can not be evaluated.

▸ Include a narrative description addressing the items identified in 12.8.604-1a (ARM)

♦ Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

♦♦ Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

HUMAN ENVIRONMENT

10. PUBLIC SERVICES/TAXES/UTILITIES Will the proposed action:	IMPACT ☼				Can Impact Be Mitigated ☼	Comment Index
	Unknown ☼	None	Minor ☼	Potentially Significant		
a. Have an effect upon or result in a need for new or altered governmental services in any of the following erees: fire or police protection, schools, parks/recreational facilities, roads or other public maintenance, water supply, sewer or septic systems, solid waste disposal, health, or other governmental services? If any, specify: _____			x			
b. Have an effect upon the local or state tax base and revenues?		x				
c. Result in a need for new facilities or substantial alterations of any of the following utilities: electric power, natural gas, other fuel supply or distribution systems, or communications?		x				
d. Result in increased used of any energy source?		x				
▶ e. Define projected revenue sources						
▶ f. Define projected maintenance costs.						
g. Other: Funding			x			

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

10.a. Any option selected will mean increasing use of TCL as recreational property, hence any option will require more fire, and police protection as use increases. Options II and III will place less demand on fire and police protection as the number of sites and users will be limited, with Option III being more limited than Option II. The purpose of this project is to provide a higher quality recreational experience for TCL users, and will increase recreational facilities. Roads will be maintained at some level in Options II and III, with Option III having fewer miles of roads. The need for solid waste disposal will increase with any option selected.

Enforcement of regulations established in Options II or III will require additional personnel through Fish, Wildlife and Parks, and through increased volunteer efforts. A budget forecast for this can be seen in Appendix D.

10.b. Increased patrols in this area and increased protection for resources and individuals will require additional personnel from Fish, Wildlife and Parks. This would be paid for through fishing license dollars. See Appendix D for cost estimates for development and operation of this project.

10.c. The new facilities planned in the TCL area are, with the exception of the peninsula, generally without electrical power, with the exception of the peninsula. Funding to pump the sealed vault toilets would be required, but very limited demands for electricity would be made.

10.g. As recognized earlier, there is a need to provide more enforcement and other management activities with increased public use. Funding for this will have to come from State fishing license dollars. Funding for maintenance on Fishing Access Sites is funded through $.25 from every fishing license, with an additional $.25 going towards weed control, river restoration, and some maintenance functions. This amounts to a budget of $800,000 per year. Optimal funding for TCL would be $52,088, or 7% of the total Fishing Access Maintenance Budget for the state. This increase in operational expenses will impact other sites state wide, and funds will have to be spread over an increasing number of sites.

☼ Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or can not be evaluated.

▶ Include a narrative description addressing the items identified in 12.8.604-1a (ARM)

♦ Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

♦♦ Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

HUMAN ENVIRONMENT

▸ 11. AESTHETICS/RECREATION Will the proposed action result in:	IMPACT ☼				Can Impact Be Mitigated ☼	Comment Index
	Unknown ☼	None	Minor ☼	Potentially Significant		
a. Alteration of any scenic vista or creation of an aesthetically offensive site or effect that is open to public view?		x				
b. Alteration of the aesthetic character of a community or neighborhood?		x				
▸ c. Alteration of the quality or quantity of recreational/tourism opportunities and settings? (Attach Tourism Report)				x	Yes	
d. ♦ For P-R/D-J, will any designated or proposed wild or scenic rivers, trails or wilderness areas be impacted? (Also see 11a, 11c)		x				
e. Other: _____						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

11.c. Logan State Park is located in the middle of the TCL area. This full facility State Park charges fees for entrance and camping, something that will not be done at TCL. As facilities are developed at TCL, there will be a disincentive for users to stay at Logan State Park, instead, individuals will elect to stay in a very similar facility which is free. Logan State Park has been designed for heavy use, with the development of designated site, flush toilets, boat launching dock, water, garbage pickup, and a dump station, and should be upgraded with amenities which encourage the public to use this site, such facilities could include group picnic and camping areas, showers, handicapped accessible facilities, and a boat mooring dock. By doing so recreationists will be encouraged to use, and be willing to pay to use, this site instead of becoming more dispersed throughout TCL, hence increasing the load in that area. Additionally, designing Logan to accommodate the larger RV's currently on the market would target a user group that may be unable to unwilling to use the rest of the TCL area. The purpose of the TCL management plan is to allow for dispersed camping on the back side of the lakes while providing developed facilities on the front side of the lakes for individuals who prefer this type of use. Logan State Park should become an intregal part of this plan, instead of being allowed to degrade and contribute toward the problem.

The quality of recreational opportunities on TCL will be improved with Options II and III, but the number of sites available will be reduced to achieve this improved quality. Increased patrols in this area and increased protection for resources and individuals will require additional personnel from Fish, Wildlife and Parks. This would be paid for through fishing license dollars. See Attachment E for cost estimates for development and operation of this project.

☼ Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or can not be evaluated.

▸ Include a narrative description addressing the items identified in 12.8.604-1a (ARM)

♦ Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

♦♦ Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

HUMAN ENVIRONMENT

12. CULTURAL/HISTORICAL RESOURCES Will the proposed action result in:	IMPACT ☼				Can Impact Be Mitigated ☼	Comment Index
	Unknown ☼	None	Minor ☼	Potentially Significant		
▶ a. Destruction or alteration of any site, structure or object of prehistoric historic, or paleontological importance?		x				
b. Physical change that would affect unique cultural values?		x				
c. Effects on existing religious or sacred uses of a site or area?		x				
d. ♦♦ For P-R/D-J, will the project affect historic or cultural resources? **Attach SHPO letter of clearance.** (Also see 12.e)		x				
e. Other: _____						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrativa if needed):

☼ Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or can not be evaluated.

▶ Include a narrative description addressing the items identified in 12.8.604-1a (ARM)

♦ Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

♦♦ Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

HUMAN ENVIRONMENT

13. SUMMARY EVALUATION OF SIGNIFICANCE Will the proposed action, considered as a whole:	IMPACT ☼				Can Impact Be Mitigated ☼	Comment Index
	Unknown ☼	None	Minor ☼	Potentially Significant		
a. Have impacts that are individually limited, but cumulatively considerable? (A project or program may result in impacts on two or more seperete resources which creete e significant effect when considered together or in total.)			X			
b. Involve potential risks or adverse effects which are uncertain but extremely hazardous if they were to occur?				X		
c. Potentially conflict with the substantive requirements of any local, state, or federal law, reguletion, standerd or formal plan?			X			
d. Esteblish e precedent or likelihood thet future actions with significant environmentel impacts will be proposed?		X				
e. Generate substentiel debete or controversy about the nature of the impacts that would be creeted?		X				
f. ♦ For P-R/D-J, is the project expected to have organized opposition or generete substantial public controversy? (Also see 13e)			X			
g. ♦♦ For P-R/D-J, list any federel or state permits required.						

Narrative Description and Evaluetion of the Cumuletive end Secondary Effects on Land Resources (Attach edditionel pages of narrative if needed):

13.a. Either Options II or III would change current use patterns in this are. While these changes would cause less environmental damage than is currently occurring, the change in use patterns will not be popular with all individuals. Continuation of no controls, Option I could significantly impact water quality, soil compaction, the spread of noxious weeds, and wildlife species, and increased user conflicts. Option II would attempt to control these uses and conflicts, and Option III would lessen the number of sites, and make some sites walk in, reducing these conflicts even further.

13.b. The potential for wildfire due to uncontrolled campsite fires is a concern in this area. Option I would do nothing to address this concern, while Options II and III would introduce controls in this area. Any option would require additional personnel to monitor recreational users and patrol the area for hazards.

13.c. Conflict with health department regulations concerning the availability of sanitary facilities and water to campers has been discussed. See page 4, section 10.c. Overlapping Jurisdiction, for further discussion of this issue.

13.f. See 13.a. above.

☼ Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or can not be evaluated.

▸ Include a narrative description addressing the items identified in 12.8.604-1a (ARM)

♦ Determine whether the described impact may result end respond on the checklist. Describe any minor or potentially significant impacts.

♦♦ Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

1. Description and analysis of reasonable alternatives (including the no action alternative) to the proposed action whenever alternatives are reasonably available and prudent to consider and a discussion of how the alternatives would be implemented:

Please see Appendix B, Thompson Chain of Lakes: An Inventory and Guidelines for Recreation Planning, and Appendix A, pages 1-3 TCL Management Plan and Environmental Assessment.

Option I was reviewed in the Thompson Chain of Lakes Management Plan and Environmental Assessment, and was deemed unacceptable at that time. Option II follows the recommendations of the TCL Management Plan, i.e., the camping resource is designed to retain the dispersed opportunities for recreational vehicle users. Option III provides a more diverse spectrum of recreational management opportunities, by providing some boat-in and walk-in sites, and by closing some sites that have been created since the planning process began in 1991. Option III also addressed a user conflict on Crystal Lake by eliminating a site in Turtle Bay and creating a site on the highway side of the lake in a less sensitive area.

2. Evaluation and listing of mitigation, stipulation, or other control measures enforceable by the agency or another government agency:

Please see Appendix B, Table C, page 13, the TCL Inventory and Guidelines for Recreational Planning for a listing of control measures that could be used under Options II and III to control or mitigate when additional damage is documented. These controls would be done using the Limits of Acceptable Change format discussed for management of this property. Control measures that can be used can either be designed physical controls, or done through personnel. In recognition of the downsizing of government and current trends toward fewer state employees, the TCL Management Plan and Environmental Assessment stated: "Because fiscal constraints will continue to be a concern, the plan must emphasize capital improvements and operations methods which minimize staffing and maintenance needs and costs". However, sentiment from local lot owners, the Oversight Committee, and individual recreationists using TCL have favored personnel over physical barriers due to aesthetic considerations, and the desire to feel "uncontrolled". This dichotomy will continue to be an issue at TCL.

3. Based on the significance criteria evaluated in this EA, is an EIS required? YES / NO If an EIS is not required, explain <u>why</u> the EA is the appropriate level of analysis for this proposed action:

An EIS is not required if mitigation and control measures are adopted for the level of environmental concerns. The primary controversy on this project will be social concerns in changing use patterns and limiting the current practice of pioneering new campsites.

4. Describe the level of public involvement for this project if any and, given the complexity and the seriousness of the environmental issues associated with the proposed action, is the level of public involvement appropriate under the circumstances?

A Working group was established to work with a consultant in developing these alternatives, which were then reported to the Thompson Chain of Lakes Oversight Committee. This environmental assessment and committee effort was a piggyback effort to the Thompson Chain of Lakes Management Plan and Environmental Assessment completed in November of 1993. Members of the working group represented recreationists, lot owners, and wildlife groups. The working group reports to a Chain of Lakes Oversight Committee consisting of private citizens and agency personnel interested in the Chain of Lakes area. After internal review, the draft EA will be taken to the public in a series of open houses, and public comment gathered. A final decision will be made after this process is completed.

5. Duration of comment period if any:

The comment period will begin on June 1, 1995, and extend through June 30, 1995. Public meetings will be held on June 1 in Kalispell, June 10, at Happy's Inn, and June 15 in Libby.

6. Name, title, address and phone number of the Person(s) Responsible for Preparing the EA:

Marty Watkins
Fish, Wildlife & Parks
490 N. Meridian
Kalispell, MT 59901
(406) 752-5501

PART III. NARRATIVE EVALUATION AND COMMENT

1.b. Option I will continue to allow disruption, displacement, erosion, compaction, moisture loss and loss of over-covering of soil due to continued use and pioneering of new sites. Additionally erosion would increase with the pioneering of additional user made boat ramps in the various lakes.

Options II and III will limit the increase in pioneered sites, which will decrease the current rate of soil compaction and erosion. In addition, Options II or III should decrease the amount of soil compaction and erosion that is currently occurring due to the placement of boat ramps in appropriate locations, (with concrete boat ramps placed in heavy use areas), and the removal of boat ramps that are now being pushed into the lakes at random locations. By reducing the number of ramps, soil compaction and erosion should be decreased. Also in Options II and III, five sites are designed to accommodate additional use, and developed to a level that erosion and runoff should be reduced. Option III would be more beneficial than Option II in retaining soil cover and preventing erosion as some sites are closed, and others are made walk in or boat in, thus reducing damage from roading.

2.a. Currently campfires are used throughout the Chain of Lakes area. Under Option I, the number of sites and hence the number of campfires would increase. With increased site control established in Options II and III, and the reduction in pioneered camps in these options, the number of campfires may be reduced. The danger of wildfire from unattended campfires in a concern in this area. The development of specific sites, and possibly the addition of fire rings in designated areas will reduce this hazard.

3.a. Option I would affect water quality due to increased use without proper sanitary facilities. In addition, increasing numbers of pioneered sites would reduce vegetation, and hence increase erosion and turbidity as that erosion moves into the lakes.

Options II or III would decrease surface runoff from exposed soils that are occurring due to current use patterns. Option III would be more beneficial to maintaining or increasing water quality than Option II. Both Option II or III would provide sanitary facilities and hence protect water quality from improper disposal of waste.

3.b. Option I could impact drainage patterns as more user induced boat ramps are pushed into the various lakes, causing erosion problems. Options II and III would install adequate boat ramps and block off user made ramps.

3.h. Contamination of surface groundwater would occur under Option I due to the lack of sanitary facilities. Options II and III provide sanitary facilities, and so would reduce pollution from this source.

4.e. Noxious Weeds are a concern in this area as the number of roads and off road use in the area readily spreads weeds. Both Options II and III would restrict vehicles to established roadways, while Option I would not. A weed management plan for TCL has been incorporated into the Region One Noxious Weed and Exotic Vegetation Management Plan dated December, 1994. Please see Attachment F for selected portions of the Region One Noxious Weed Plan. Neither Option II or III of the proposed alternative will cause a significant difference in the amount of weeds in the area. Option III, by eliminating some sites, will reduce the exposure of some areas to weeds.

4.f. There are wetlands in the TCL area. In Options II or III these areas will be protected for further damage by placing signing and barriers to inhibit off road vehicle use. In Option I, damage will continue to occur in the wetland between Lower and Middle Thompson due to ATV use.

5.f. The threatened bald eagle and the loon, a species of special concern, exist in the TCL area. Option I will continue to impact these species as the number of campsites and the numbers of recreationists increase. Neither Option II or III will have a significantly different impact on these species. Under Options II and III buoys will be placed around loon nests to protect this species and an informational signing program will begin to educate people regarding the loon's habitat needs.

A bald eagle nest on Horseshoe Lake is of concern. Under the Thompson Chain of Lakes Management Plan and Environmental Assessment it was agreed that this nesting site would be monitored, and if the eagles failed to rear young for three years in a row a eagle nest management plan would be implemented. For a more in depth discussion of threatened and endangered species, and species of special concern please see Attachment G, pages 58-60 of the TCL Management Plan and Environmental Assessment.

5.g. Option I could increase stress on wildlife species as recreational use increases. Both Options II a current stress levels on wildlife in the Thompson Chain of Lakes area. As both options limit the numbe annually increasing use will be slowed. Option III closes some sites, which will lessen stress on wildlife II.

5.h. Please see 5.f. above.

6.a. Private landowners are currently impacted by recreational use on the interlocking Chain of Lakes are increase this impact with increased recreational use. Recreationists would also be impacted by increa general increase in number of campsites. Options II and III will reduce conflict, with Option III being mos lot owners needs.

7.a. The current land ownership is interlocking timber and grazing land with recreational land and privat recreation increases on both Chain of Lakes property and Plum Creek property, management options that change this recreational opportunity will meet with growing resistance. Grazing and recreation has experie conflicts, and will continue to be monitored in the future. Options II and III control use on TCL property, an fire danger and use conflicts between private property owners and recreationists. Hence, in this aspect th impact on private lot owners, grazers, and timber companies than Option I. Conversely, because Options use on TCL property, more and more individuals will use Plum Creek property due to the absence of regul the limitations on the availability of sites on TCL. This will become more evident as recreational use increas of recreational use patterns may be potentially damaging to Plum Creek properties.

7.d. Uncontrolled use of the TCL property creates conflicts with private lot owners in reference to noise, re public/private conflicts, and fire danger from uncontrolled campfires. Option I would continue the current u Options II and III would institute some controls on usage, and would reduce conflicts with private lot owner II or III to work, personnel will be needed to educate and enforce regulations. Without increased patrols, no p will be effective.

8.c. The hazard created by unsupervised campfires has been a major concern in this area. Option I w numbers of pioneered campsites, and will allow increasing numbers of campsites and hence increasing haz Options II and III will stop new sites from being pioneered, and will hence limit fires to existing areas which opportunity for fires to get into root formations and spread underground. Option III will make some areas wal limiting use in some areas, and will eliminate some campsites created since the management decision making p thus reducing the opportunity for unsupervised fires. Personnel for patrol is the best alternative for reduci unsupervised fires, and hence, wildfire.

9.a. The purpose of this project is to provide a higher quality recreational experience in the TCL area. All alt therefore impact the type and amount of recreational opportunity available. With increased public awar recreational opportunities in this area, market values for private lots in this area will increase.

9.b. With the change in the primary use of the TCL property from timber land to recreational land, ch surrounding community will occur. In all Options more recreationists will come to this area, increasing the need f gasoline, fishing licenses, etc. This increased demand will change the amenities offered in the area.

9.c. As employment is impacted by the change in the use of this property for logging to use for recreation, e opportunities will change also. All three options will similarly impact the types of jobs available in the immedia

9.d. Please see 9.c. above.

9.f. A new highway project is on line for the TCL area. This project will limit the number of turnoffs avai public from the highway. This will be the same for any option chosen. In addition, a rest area is planned for the This will provide additional picnic and restroom facilities for the public traveling in this area, which may sligh movement patterns.

10.a. Any option selected will mean increasing use of TCL as recreational property, hence any option will require and police protection as use increases. Options II and III will place less demand on fire and police protection as t of sites and users will be limited, with Option III being more limited than Option II. The purpose of this project is

a higher quality recreational experience for TCL users, and will increase recreational facilities. Roads will be maintained at some level in Options II and III, with Option III having fewer miles of roads. The need for solid waste disposal will increase with any option selected.

Enforcement of regulations established in Options II or III will require additional personnel through Fish, Wildlife and Parks, and through increased volunteer efforts. A budget forecast for this can be seen in Appendix D.

10.b. Increased patrols in this area and increased protection for resources and individuals will require additional personnel from Fish, Wildlife and Parks. This would be paid for through fishing license dollars. See Appendix D for cost estimates for development and operation of this project.

10.c. The new facilities planned in the TCL area are, with the exception of the peninsula, generally without electrical power, with the exception of the peninsula. Funding to pump the sealed vault toilets would be required, but very limited demands for electricity would be made.

10.g. As recognized earlier, there is a need to provide more enforcement and other management activities with increased public use. Funding for this will have to come from State fishing license dollars. Funding for maintenance on Fishing Access Sites is funded through $.25 from every fishing license, with an additional $.25 going towards weed control, river restoration, and some maintenance functions. This amounts to a budget of $800,000 per year. Optimal funding for TCL would be $52,088, or 7% of the total Fishing Access Maintenance Budget for the state. This increase in operational expenses will impact other sites state wide, and funds will have to be spread over an increasing number of sites.

11.c. Logan State Park is located in the middle of the TCL area. This full facility State Park charges fees for entrance and camping, something that will not be done at TCL. As facilities are developed at TCL, there will be a disincentive for users to stay at Logan State Park, instead, individuals will elect to stay in a very similar facility which is free. Logan State Park has been designed for heavy use, with the development of designated site, flush toilets, boat launching dock, water, garbage pickup, and a dump station, and should be upgraded with amenities which encourage the public to use this site, such facilities could include group picnic and camping areas, showers, handicapped accessible facilities, and a boat mooring dock. By doing so recreationists will be encouraged to use, and be willing to pay to use, this site instead of becoming more dispersed throughout TCL, hence increasing the load in that area. Additionally, designing Logan to accommodate the larger RV's currently on the market would target a user group that may be unable to unwilling to use the rest of the TCL area. The purpose of the TCL management plan is to allow for dispersed camping on the back side of the lakes while providing developed facilities on the front side of the lakes for individuals who prefer this type of use. Logan State Park should become an intregal part of this plan, instead of being allowed to degrade and contribute toward the problem.

The quality of recreational opportunities on TCL will be improved with Options II and III, but the number of sites available will be reduced to achieve this improved quality. Increased patrols in this area and increased protection for resources and individuals will require additional personnel from Fish, Wildlife and Parks. This would be paid for through fishing license dollars. See Attachment E for cost estimates for development and operation of this project.

13.a. Either Options II or III would change current use patterns in this are. While these changes would cause less environmental damage than is currently occurring, the change in use patterns will not be popular with all individuals. Continuation of no controls, Option I could significantly impact water quality, soil compaction, the spread of noxious weeds, and wildlife species, and increased user conflicts. Option II would attempt to control these uses and conflicts, and Option III would lessen the number of sites, and make some sites walk in, reducing these conflicts even further.

13.b. The potential for wildfire due to uncontrolled campsite fires is a concern in this area. Option I would do nothing to address this concern, while Options II and III would introduce controls in this area. Any option would require additional personnel to monitor recreational users and patrol the area for hazards.

13.c. Conflict with health department regulations concerning the availability of sanitary facilities and water to campers has been discussed. See page 4, section 10.c. Overlapping Jurisdiction, for further discussion of this issue.

13.f. See 13.a. above.

ATTACHMENT A

THOMPSON CHAIN OF LAKES MANAGEMENT PLAN AND ENVIRONMENTAL ASSESSMENT

NOVEMBER, 1993

PLAN HIGHLIGHTS
(Preferred Alternative)

The Montana Department of Fish, Wildlife and Parks (FWP) proposes to accept ownership of 3,917.83 acres of property donated to the people of Montana by Champion International Corporation and the Richard King Mellon Foundation, assisted by the conservation Fund to be named Thompson Chain of Lakes (TCL). The Foundation purchased the property under its America Land Conservation Program, from Champion International Corporation, which sold the holdings at a favorable price for conservation purposes.

Management Goal: Thompson Chain will be managed as a fishing access area for traditional dispersed recreation use, with management and development consistent with FWP's fishing access program. The focus will be on protecting the resource and providing public access for the purpose of boating and fishing (i.e., boat ramps, parking and road improvements, vault toilets, signing and fencing). Picnic facilities, camping improvements, hiking and canoe trails, interpretive materials or signing and/or educational centers are generally not part of this program. However, because of the use of TCL for picnicking and camping, these uses will be allowed to continue and facility improvements are not precluded. FWP may adopt special regulations for TCL if necessary to implement management goals. Land classification guidelines and administrative rules pertaining to FWP lands are shown in appendixes C and B, respectively.

Entrance fees are not charged at fishing access sites; fees for overnight camping are allowed if the level of campground development warrants it.

Costs for initial site protection activities are planned to be minimal. The public interest in providing perpetual access on Rainbow, Cad, Topless, Bootjack and Cibid lakes is recognized. The management agency will meet with corporate owners to ascertain the potential for acquisition of easement, purchases and land trades and will report back to the Advisory Council. No private property would be condemned. See Section 87-1-209, MCA in Appendix A.

Rehabilitation, small campsite development and maintenance may be undertaken on a volunteer basis by local or statewide groups. Work will be coordinated through FWP.

Within legal constraints imposed by federal or state statute, dispersed sites or existing roads traditionally used would not be closed unless unacceptable conflicts are documented and not until Montana Environmental Policy Act (MEPA) procedures have been followed. Protection of wildlife, fisheries, vegetation, historic and archeological sites, and water resources will be given priority.

The camping resource is designed to retain the dispersed opportunities for recreation vehicle and hike/boat in users. Campsite protection and rehabilitation will be given priority at Loon Lake, the peninsula between Lower and Middle Thompson, the site at the bridge on Upper Thompson, Horseshoe Lake's main camp and a site near the east end of McGregor. Facilities could include

boat ramps, toilets, fences, road repair, parking, access for the disabled, fire rings and signs. Site specific plans for these sites will be completed and public comment sought. At other locations in TCL, it is recognized that portable or vault toilets may be provided; however, drinking water and garbage service will generally not be available.

The road between Loon and Horseshoe lakes will continue to be a vehicle access road, and the dispersed campsites at Horseshoe will remain unless unacceptable conflicts are documented and not until the MEPA procedures have been followed.

Vehicle access on TCL will be maintained at the current level; some road repairs on heavily impacted roads would be done. Road improvements generally will consist of correction of drainage problems in site specific locations, with the majority of the roads remaining in their relatively unimproved state. FWP would work with Plum Creek to resolve congestion and parking concerns along the ACM Road. Boat access at the lakes would be improved at designated sites.

Some social conflicts presently exist at TCL. Part of operations planning must include a plan for enforcement of regulations.

Boating activities also provide an opportunity for social conflict at TCL. FWP has limited statutory authority to manage these activities. Current statute (see Appendix C) allows motor boat restrictions only for environmental damage, private property damage, or public health and safety reasons. Public sentiment appears to support having a full range of boating opportunity on McGregor, Upper Thompson, Middle Thompson, Lower Thompson and Crystal lakes. No-wake limits appear to be supported on Loon, Lavon, Bootjack, Rainbow, Leon and smaller pothole lakes. Public sentiment is unclear regarding boating restrictions on Horseshoe Lake. Any restrictions not covered by existing statute would require public involvement and regulatory action. Voluntary no wake seasonal boat closures within 150 yards of active Loon nests would be implemented.

The original Chain of Lakes Advisory Council will end upon completion of this plan. A new TCL Oversight Committee will be created to serve as the conduit between FWP and the public for exchanging information regarding specific development plans and management strategies. This committee would meet periodically (at least annually) and would provide advice focusing preparation and presentation of FWP's annual work plans to the public. A cooperative management system to take advantage of and utilize equipment and expertise between the various agencies that have managing responsibilities in the area is encouraged. The Oversight Committee and FWP would explore creative management alternatives, including the use of volunteers and Adopt-a-Site strategies by service clubs and other groups, as well as work with FWP to monitor the effectiveness of the management plan. The plan will be reviewed on a five year cycle with updates every ten years.

Policies, Strategies, and Planning Issues: Since TCL has been used for recreation since the late 1800s its management for that purpose is in keeping with its recent past.

The principle reason TCL has been an attractive recreation area is that it provides a mix of developed and dispersed recreation opportunities. The lake water is generally clear, cold, deep and popular with anglers. Wildlife is abundant.

If Thompson Chain of Lakes is to retain its attraction for recreation, the quality of the environment that brings people here should be maintained and enhanced along with recreation opportunities.

Because fiscal constraints will continue to be a concern, the plan developed for TCL must emphasize capital improvements and operations methods which minimize staffing and maintenance needs and costs. As recreational priorities and human use patterns change, elements of this plan may be modified. This plan is structured such that modifications can be implemented if changing conditions require. When, through continued monitoring, a situation is documented to be causing environmental or social change, an assessment of that change will be done. If the change is not in accordance with the purpose of this plan, FWP will "trigger" steps to eliminate or mitigate for the change and restore the status quo. A public participation and analysis process will be utilized by using the MEPA guidelines. A copy of this act is in Appendix C.

Figure 1. Horseshoe Lake

ATTACHMENT B

THOMPSON CHAIN OF LAKES INVENTORY AND GUIDELINES FOR RECREATIONAL PLANNING

JANUARY 1, 1994

THOMPSON CHAIN OF LAKES

AN INVENTORY AND GUIDELINES FOR RECREATION PLANNING

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INTRODUCTION

Upon publication of the Environmental Assessment and management plan for Thompson Chain of Lakes (TCL), it was determined that a more intensive recreation site planning system was necessary to establish existing conditions to be used in conjunction with public comments to help direct future management actions.

The planning model selected to help direct management actions is The Limits of Acceptable Change System as described in "The Limits of Acceptable Change (LAC) System for Wilderness Planning," (Stankey Et Al) Lucas, Petersen and Frissell, Intermountain Forest and Range Experiment Station, USDA Forest Service, General Technical Report, INT-176, January 1985. While LAC was developed for wilderness planning, it can be adapted to reflect the conditions at TCL as well.

In addition to LAC, many additional studies, reports and research documents were reviewed and definitions used or reclassified to reflect local conditions.

The LAC planning system consists of interrelated steps leading to development of a set of measurable objectives that define desired recreation conditions (fig. 1).

Step one through four and the monitoring plan in step nine is to be accomplished under this contract with the Montana Department of Fish, Wildlife and Parks. Steps five through eight are to be accomplished with a planning group consisting of area residents, FWP personnel and the contractor. The implementation actions in step nine is to be accomplished by the Montana Department of Fish, Wildlife and Parks.

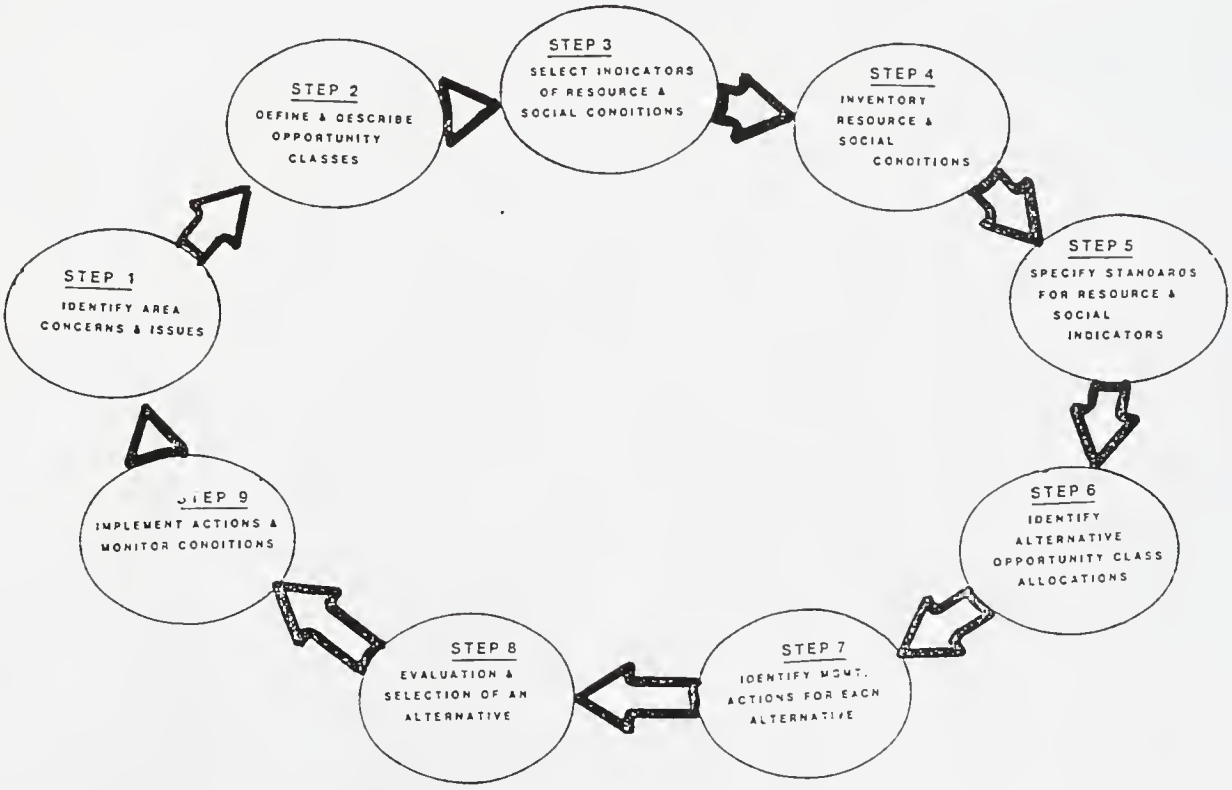


Figure 1.-The Limits of Acceptable Change (LAC) planning system.

STEP 1: ISSUES AND CONCERNS

The draft management plan describes present recreational use and facilities in the introduction. Presently, the only managed areas occur at Logan State Park (Montana State Parks) and McGregor Lake Campground (U.S. Forest Service). Apart from these two sites there is little management of recreation opportunities or facilities at TCL.

During the public comment period for the Management Plan, major issues and concerns were identified as:

- Sanitation: Many pit toilets are less than 100 feet from lakes, and water tables are evident in several pits. This lack of proper sanitary facilities contributes to water pollution and an unsanitary environment.

- Water Quality: Maintain or improve the water quality of the lakes.

- Recreation Use: Maintain the dispersed nature of the recreation experience. Manage facilities to protect the natural resources.

- Access/Roads: Allow relatively easy access. Balance easy access with need for privacy.

- Vegetation Management: Maintain mixed forest cover. Provide for native grasses, shrubs and wetlands. Control noxious weeds.

- Boating: Competition with other recreation uses. Fishing conflicts with speed boating and water skiing. Jet skiing conflicts with swimmers and boaters. The noise of speed boating and jet skiing interfering with the solitude of the area.

- Wildlife: Competition with recreation users and the loss of wetlands and old growth. Bald eagles, loons and other wildlife game and nongame animals are of concern in this area.

- Livestock Grazing: The mixing of recreating users and wildlife with cattle may be undesirable, as the users compete with one another.

STEP 2: RECREATION OPPORTUNITY CLASSES

Recreation opportunity classes define the types of outdoor recreational opportunities visitors may desire and expect. They are a convenient way an area or site may be mapped according to the environmental, social, physical recreational and managerial setting. Recreational opportunities reflect management objectives for a given area and the standards for these classes will direct future management decisions.

Region One recreation management personnel, Montana Department of Fish, Wildlife and Parks, have established seven recreation opportunity classes so recreational opportunities and activities within each type of area or "zone" can be described, identified, and managed similarly throughout the region.

Class 1, Special Resource, is to provide for special management practices to preserve unique resources such as threatened and endangered species and unique historical or archeological features. Classes 2, 3, and 4 provide for non-motorized recreation, Classes 5, 6, and 7 provide for motorized opportunities. Table A outlines the full spectrum of characteristics that identify each opportunity class.

Class 1: Special Resource

This class is primarily for the protection of threatened and endangered species or other identified resources of special interest. The environmental condition is unmodified with no measurable human impacts. The opportunity for isolation and solitude is moderate. Access to the area may not be provided, and public use may be restricted or seasonal closures may be in place.

Recreational activities would include hiking, which may be limited by area or seasonal closures, and interpretive opportunities are through self discovery.

Management presence is not noticeable, with no site modification, no facilities, no trails, and no roadways being developed. Signing will be limited to boundary marking and ranger patrols will be frequent around the perimeter of the area.

Class 2: Natural

This class is primarily for the maintenance of a natural environment. The environmental condition is unmodified with any human impacts recovering annually. The opportunity for isolation and solitude is high. Access to the area may be limited, but permanent or seasonal closures will not be in effect.

Recreational activities would include hiking, picnicking, wildlife viewing, photography, and the development of outdoor skills, and interpretive opportunities are through self discovery.

Management presence is not noticeable, with limited site modification, and no facilities or roadways. Trails would not be developed or maintained. Signing would not be present, and ranger patrols would be infrequent.

Class 3: Semi-Natural

This class is primarily to provide a natural environment, but with easier access than Class 2. The environmental condition is semi-modified, with human impacts confined, but visible from year to year. The area is moderately accessible, with no permanent or seasonal closures.

Recreational activities would include hiking, picnicking, wildlife viewing, photography, and the development of outdoor skills, and interpretive opportunities would be through self discovery with some maps and brochures.

Management presence is noticeable only at access points, with limited site modification, no roadways, and facilities limited to health and safety requirements. Trails would be semi-developed. Signing would be limited and infrequent, and ranger patrols would be limited.

Class 4: Modified

This class is primarily to provide opportunities to experience nature and wildlife in a family setting. The environmental condition is semi-modified, with human impacts confined, but visible from year to year. The area is easily accessible, with no permanent or seasonal closures.

Recreational activities would include hiking, guided hikes, camping at specific locations, picnicking, and photography, and interpretive opportunities available through limited signing, maps, brochures, and guidebooks. Guided hikes may be provided.

Management presence is readily apparent, moderate site modification exists, and health, safety, and interpretive facilities are available. While no roadways exists, trails are developed. Signing would be present, and regular ranger patrols would occur in this area.

Class 5: Roaded Natural

This class provides the opportunity to experience nature in a family setting accessible by road. The environmental condition is natural, with some human impacts. Other impacts are visible from year to year. The areas is easily accessible, with no permanent or seasonal closures.

Recreational activities would include camping, hiking, picnicking, fishing and boating, and interpretive opportunities would be through self-discovery.

Management presence would be noticeable, with limited site modifications, Facilities for health and safety concerns are within walking distance. Roadways are unsurfaced, and trails are semi-developed. Signing is limited, and regular ranger patrols would occur in this area.

Class 6: Roaded Semi-Natural

This class provides the opportunity to recreate in a natural appearing area accessible by road. The environmental condition is modified, with many human impacts. Impacts are visible from year to year. The area is easily accessible with no permanent or seasonal closures.

Recreational activities would include camping, hiking, picnicking, fishing and boating, and interpretive opportunities would be through self discovery with some maps and brochures.

Management presence would be noticeable, with moderate site modifications. Health and safety facilities would be on site, with recreational facilities provided within a short driving distance. Roadways are low-standard gravel, and trails are developed and maintained at Level 2. Signing is apparent, and regular ranger patrols would occur.

Class 7: Roaded Modified

This class provides recreation in a environment designed for single and multi family units. The environmental condition is highly modified, with heavy human impacts. Impacts are visible from year to year. The area is easily accessible with no permanent closures.

Recreational activities would include camping, hiking, picnicking, fishing and boating, and interpretive opportunities would be available through site facilities, maps, brochures, guidebooks, and fireside programs.

Management presence would be readily apparent, with extreme site modification. Health and safety facilities would be provided on site. Recreation and interpretive facilities would be provided within walking distance. Roadways would be high standard gravel or paved, and trails would be developed and maintained. Signing is apparent, and regular ranger patrols would occur.

RECREATIONAL OPPORTUNITY CLASS →	CLASS 1 SPECIAL RESOURCE ZONE	CLASS 2 NATURAL	CLASS 3 SEMI-NATURAL	CLASS 4 MODIFIED	CLASS 5 ROADED NATURAL	CLASS 6 ROADED SEMI-NATURAL	CLASS 7 -ROADED MODIFIED
PURPOSE →	PROTECTION OF UNIQUE FEATURES	MAINTENANCE OF NATURAL ENVIRONMENT	PROVIDE NATURAL ENVIRONMENT WITH EASIER ACCESS	PROVIDE OPPORTUNITIES TO EXPERIENCE NATURE IN FAMILY SETTING	PROVIDE OPPORTUNITIES TO EXPERIENCE NATURE IN FAMILY SETTING ACCESSIBLE BY ROAD	PROVIDE OPPORTUNITY TO RECREATE IN NATURAL APPEARING SETTING ACCESSIBLE BY ROAD	PROVIDE RECREATION IN ENVIRONMENT DESIGNED FOR SINGLE & MULTI-FAMILY UNITS
ENVIRONMENTAL CHARACTERISTICS							
Ecological Conditions	Unmodified	Unmodified	Semi-modified	Semi-modified	Modified	Modified	Modified
Human Impacts	Not measurably affected, site recovers annually	Not measurably affected, site recovers annually	Confined impacts, visible from year to year	Confined impacts, visible from year to year	Some bare ground, some site damage, etc.	Moderate areas of barren ground. Site damage visible from year to year.	Large areas of barren core ground. Heavy site damage visible from year to year.
SOCIAL CHARACTERISTICS							
Opportunities for isolation and solitude	Moderate	High	Moderate	Low	Moderate	Low	None
Interaction with other on site users	Rare, no group interaction	Rare, rare group interaction	Moderate, group interaction minimal	Moderate to high, group interaction likely during peak seasons	Low, group interaction minimal	Moderate, group interaction moderate	High, group interaction moderate
Interactions with off site uses	None	None	Noise	Noise and view	Noise	Noise and view	Noise and view
Recreation Activities	Hiking (Limited by Seasonal Closures)	Hiking, picnicking, wildlife viewing, photography, outdoor skills development	Hiking, picnicking, wildlife viewing, photography, outdoor skills development	Hiking, guided hikes, camping (site specific) picnicking, Photography	Camping, hiking, picnicking, fishing, boating	Camping, hiking, picnicking, fishing, boating	Camping, hiking, picnicking, fishing, boating
RECREATIONAL ACTIVITIES							
Challenge	Low to High	High	Moderate	Low	Low	Low	Low

Table A - Comparison of characteristics of Recreation Opportunity Classes (ROC).

RECREATIONAL OPPORTUNITY CLASS →	CLASS 1 SPECIAL RESOURCE ZONE	CLASS 2 NATURAL	CLASS 3 SEMI-NATURAL	CLASS 4 MODIFIED	CLASS 5 ROADED NATURAL	CLASS 6 ROADED SEMI-NATURAL	CLASS 7 -ROADED MODIFIED
Response time to emergency	Slow	Slow	Moderate	Rapid	Moderate	Moderate	Rapid
Interpretive opportunities	Self discovery	Self discovery	Self discovery with some maps and brochures	Limited signing and maps, brochures and guidebooks, guided hikes	Self discovery	Self discovery, with some maps and brochures	Site facilities, maps, brochures, guidebooks, fireside programs
MANAGEMENT CHARACTERISTICS							
Public use restricted	Yes	No	No	No	No	No	No
Seasonal closures	Yes	No	No	No	No	No	Yes
Accessibility	May not be possible	Limited	Moderate	Easy	Easy	Easy	Easy
Management presence	Not noticeable	Not noticeable	Noticeable only at access points	Readily apparent	Noticeable	Noticeable	Readily apparent
Site Modification	None	Limited	Limited	Moderate	Limited	Moderate	Extreme
Facilities	None	None	Health and safety	Health, safety and interpretation	Health and safety facilities within walking distance	Health, safety and recreation facilities	Health, safety, recreation, and interpretation facilities
Trails*	None	Not developed or maintained	Semi-developed or Level 1	Developed or Level 2	Semi-Developed, maintained Level 1	Developed and maintained Level 2	Developed and maintained Level 3
Roadways	None	None	None	None	Unsurfaced	Low-Standard Gravel	High-Standard Gravel, or Paved
Motorized use	No	No	No	No	Yes	Yes	Yes
Signing	Boundary marking	None	Limited and infrequent	Yes	Limited	Yes	Yes
Ranger Patrols	Frequent patrols around perimeter	Infrequent	Limited	Regular	Regular	Regular	Frequent

*See Appendix G

STEP 3: INDICATORS OF RESOURCE AND SOCIAL CONDITIONS

nis step is to identify indicators that are indicative of the conditions of the overall recreation opportunity class. They allow managers to define desired conditions and to assess the effectiveness of various management practices. They provide a basis for identifying where and what management actions are needed. It is important to select indicators that relate as nearly as possible to the issues and concerns, that they preferably be measurable, and that they identify specific variables to guide the inventory process (Step 4). The indicators should be capable of being measured at acceptable levels of accuracy. The indicator should reflect source relationships to the amount and/or type of use occurring. Social indicators should be related to user's and managers' concerns, and the indicators should be, at least potentially, responsive to management control.

Measurable Resource and Social Indicators

Resource	Social
Site Size	Recreation Opportunity Class
Type of Ground Cover	Development Scale
Bare Ground Area	Trash
Tree Damage	Noise
Weeds	Livestock Grazing
Percent of Shade	Crowding
Threatened and Endangered Species	Access (Roads)
Erosion	Distance to Water
Water Quality	Human Waste
	Fire Rings

STEP 4: SITE INVENTORY

he purpose of a recreation site inventory is:

- It helps in decisions on allocations of land to different recreation opportunity classes;
- knowing the range of conditions helps establish meaningful standards;
- is a step known where and what management actions will be needed.

This process is to conduct a field inventory of conditions of resource and social indicators and map the resulting information . The inventory is guided by the indicators selected in Step 3. All indicators are not necessarily present on each site. A site inventory form was developed and completed site forms and maps for the inventories sites are located in Appendix F. Site 4 on McGregor Lake is dropped as it is presently being subdivided and developed. Photographs were taken during this inventory to display visual conditions on the site. The photo points are shown on each map. All sites are numbered. Prefix letters indicate relationships to an adjacent larger and more heavily used site. All sites (private and other public) are inventories as they all influence management actions on TCL lands.

Clarification of the indicators are:

Area and Bare Ground Size: A baseline was established for most sites. Trees, fireplaces and other attractions or facilities are identified and measured from this baseline. Both the estimated use area and the area of bare ground were identified and measured for size.

egetative Cover: Consists of grass, forbs, weeds or shrubs. Pine needles were not considered as vegetative cover.

Shade: Shade is an important factor in site damage and relates to both resource and social indicators. Heavy shade and light recreation use could result in extensive bare ground, whereas light shade and moderate use could result in very little bare ground.

Trash: Use does not necessarily create lots of trash. It is more of a social problem. In some very heavily used sites very little trash was seen, while the worst conditions were located at small sites of two or three family units.

Resource Damage: Usually includes nails pounded in trees or axe marks. More extensive damage was exposed tree roots caused by excessive recreation use, or in several cases, trees sawed or chopped down. There was soil erosion at some sites due to auto use on steep access roads or travel within the site area, or excess water erosion on steep compacted soils. Other erosion problems are caused by recreation users on steep banks leading to the water.

Off-site Conflicts: Highways, the ACM road, resorts and cabins within visual sight line are major social indicators of visitor's perception of the recreational opportunity and quality. They create the discordant elements some recreation users dislike. Other indicators include adjacent sites, sites within view across the lake, motor boat noise and cattle using the sites.

A "camper unit" is defined as a motorized vehicle, motorhome, camping bus, pull-type camper, tent or device designed for sleeping, including a combination of any two that are used by parents and their unmarr. children. A family unit is a family of four or five people. The number of family units shown on the inventory map is an estimate based on the site sizes and shapes. At times, observation of use was the key factor. On several sites a number of family units were camping together as camper groups.

Family Group: Several families camping together on a site. Observed one group with seven family units.

Three levels of recreation site modification was developed for the TCL area. They are identified as Development Scales 1, 2 and 3. They indicate the degree a recreation site is presently altered or modified to accommodate the recreation users. The Development Scales are also used as an aid to help determine the recommended future plans for each recreation site.

Modification may include roads, barriers, parking areas, constructed boat ramps and other facilities to provide for site protection, a major issue and concern, as well as for comfort of the users. Facilities may include toilets (vault or water coverage), parking spurs, tables, permanent fireplaces, domestic water supply and other management services and controls such as limited stays, campground hosts, limit use and others.

Development Scale 1: No site modification. No improvements provided for site protection or comfort of users. No management controls. Spacing between camp units informal. No services. Motorized access over rough unimproved primitive roads.

Development Scale 2: Little or no site modification. Rudimentary improvements may be provided prima for protection of site rather than the comfort of users. Little or no management controls. No obvi regimentation. Normally larger area with spacing between campsites informal. Little or no services provided. Motorized access over primitive or gravel roads.

Development Scale 3: Site modification moderate to high. Facilities for protection of site as well as for the comfort of users. Rustic design of facilities is the norm. Constructed roads throughout the site, may be hard surfaced, with some vehicular traffic control devices provided. Development density approximately three to five family units per acre. Primary access may be over high standard roads. Some management control and services provided.

STEP 5: STANDARDS FOR RESOURCE AND SOCIAL INDICATORS FOR EACH RECREATION OPPORTUNITY CLASS

In Step 5, standards are established for the indicators listed in Step 3 to provide a base against which particular conditions can be judged as acceptable or not. Setting these standards is a judgmental process, however, it is important that the standards not routinely accommodate existing conditions. Using the data identified in Step 4 and descriptions of each recreation opportunity class, standards were developed to determine what management actions are needed.

Standards describe a range of conditions. As one moves across the recreation opportunity classes for any given indicator, the standards describe a logical progression or graduation of conditions. On occasions, the standards set for an indicator might be shared by two or more opportunity classes, however, they will be distinguished by other indicators. Conditions that do not discriminate between classes include air quality and water quality.

The selected standards are shown on Table B.

TABLE B: Standards for Resource and Social Indicators for Each Recreation Opportunity Class

Indicators	ROC 4	ROC 5	ROC 6	ROC 7
Resource:				
1. Site size (sq. ft.)	0 - 1,000	0-2,600	2,600-12,000	12,000+
2. Area of barren core ground per site. (sq. ft.)	0 - 500	0-2,000	2,000-10,000	10,000-20,000
Social				
3. Can view highway from site	No	Yes	Yes	Yes
4. Facilities	Health, Safety & Education Purposes	Health and Safety	Health, Safety and Recreation	Health, Safety, Recreation and Education
5. No. of family units per site	1	2	3-6	7+
6. Access roads	None	Primitive	Primitive or Gravel	Gravel or Hard Surface
7. Percent of site in shade	5 - 50	5-50	15-60	25-75
8. Number of sites within sight or sound		1	1+	1+

In addition to the above, the following indicators are established, corrected, eliminated, managed for, or improved to some degree at all remaining sites regardless of their ROC: Ground cover; tree damage and exposed tree roots; noxious weeds, erosion, water quality, trash, livestock, human waste and new sites.

STEP 6: ALTERNATIVE OPPORTUNITY CLASSES AND DEVELOPMENT SCALE

Step 6 identifies what resource and social conditions may be provided for in different parts of TCL. By analyzing the inventory data collected in Step 4, along with the area issues and concerns identified in Step 1, numerous options for recreation opportunity class allocation can be developed. Three options were developed.

One option reflects current management and conditions on the ground. Another option emphasized management of the TCL following conditions stated in the TCL management plan. A third option is oriented toward providing a more diverse spectrum of recreation management opportunities. Public comments were reviewed in preparing the three options. The three options are shown on the maps in Appendix A.

In preparing the management options, many actions were considered, including the following:

- Retain sites as inventoried.
- Close some sites.
- Expand or reduce some site signs.

- Manage sites on Plum Creek Timber lands.
- Close existing unimproved boat access.
- Construct new ramps.
- Change some sites from drive in to walk in access.
- Walk in lakes.
- Open up new areas for developed use.

Tables developed as an aid for summarizing and comparing opportunity classes and development scales in the three options, are shown in Appendices B and C.

STEP 7: MANAGEMENT ACTIONS

Step 7 identifies what management actions are necessary at each recreation site to meet the directions established in the options in Step 6. This section will:

- Identify potential management actions, Table C. The actions are classified by their behavior, site, or use modifications for each recreation opportunity class. (Table 2)
- Identify potential management actions for each site to meet the objectives established in Step 6 for each option. Tables D and E. Management actions were not developed for Option #1. This option reflects current no action and is not acceptable according to the approved management plan.
- Identify sites where standards are being met for each option. Appendix B.
- Identify sites where ROCs change as the management options change. Appendix C.

Table C: Potential Management Actions

Management Strategies	Management Actions
Modify Behavior	3. Limit camping unit numbers. 4. Increase enforcement. 7. Pack In/Pack Out. Users take rubbish and garbage with them. 9. Limit length of stay. 11. Contact users. 18. Provide recreation host at site.
Modify Site	1. Obliterate site. Remove all signs of use. May require seeding, barricading, closing. 6. Restoration. Rehabilitate impact area by seeding, relocating, barricading, etc. Remove dead trees, repair damaged area. 8. Improve access. Fill holes, improve drainage, grading, etc. 12. Close existing boat access. 13. Install vehicle barriers. 17. Provide toilets. New or replace. Pit, vault, chemical, water carriage. 19. Construct boat ramp. 20. Provide public legal access. 21. Acquire additional land. 22. Redesign site. 23. Thin trees. 24. Plant trees. 25. Remove facilities. Substandard facilities. 26. Install facilities. Firerings, tables, fences, signs, parking, etc. 28. Provide stock facilities. Hitching racks, posts, feed bins, etc. 29. Provide handicapped accessibility. 30. Survey boundary lines. 31. Close roads. 32. Expand site.
Modify Use	2. Seasonal closure. Wildlife management, Threatened and Endangered species, weather, etc. 5. Use permits. Commercial or other purposes. 10. Prohibit expansion. 14. Tent use only. 15. Eliminate stock. 16. Eliminate cattle. May require fencing or elimination of grazing permit. 27. Limit group size. 33. Swimming beach water samples. Coliform or fecal test to determine if site sue is polluting the lake.

TABLE D: Option 2 - Alternative IV of the TCL Management Plan

Lake Name	Site Number	Proposed ROC	Management Actions as Listed in Table C.
McGregor	1	6	(3) Limit family unit numbers, (4) Enforcement, (6) Restoration, (7) Pack In/Pack Out, (8) Improve access, (9) Limit length of stay (11) Contact users, (12) Close boat access, (17) Provide toilets, (20) Need public access, (22) Redesign site, (26) Install facilities, (27) Limit group size, (31) Close Roads.
	1A	6	(3) Limit family unit numbers. All other management actions are the same as Site No. 1.
	1B	6	(3) Limit family unit numbers. All other management actions are the same as Site No. 1.
	2	6	(3) Limit family unit numbers. All other management actions are the same as Site No. 1.
	3	6	(3) Limit family unit numbers, (4) Enforcement, (6) Restoration, (7) Pack In/Pack Out, (8) Improve access, (9) Limit length of stay, (17) Provide toilet, (19) Construct boat ramp, (20) Need public access, (22) Redesign site, (26) Install facilities, (27) Limit group size, (31) Close roads. (Day use & boat access)
	3A	6	All management actions are the same as Site No. 3.
F. S. Campground	-	-	McGregor Lake Campground. (22) Redesign site, (32) Expand site.
Little McGregor	46	6	(20) Need Public Access.
	66	6	(20) Need Public Access.
	67	6	(20) Need Public Access.
Lower Thompson	38	6	(17) Provide toilets.
	38A	6	(17) Provide toilets.
	38B	6	(17) Provide toilets.
	41	6	(17) Provide toilets.
	41A	6	(17) Provide toilets.
	41B	6	(17) Provide toilets.
	41C	6	(17) Provide toilets.
	42	7	(3) Limit family unit numbers, (4) Enforcement, (6) Restorations, (7) Pack In/Pack Out, (8) Improve Areas, (9) Limit length of stay, (11) Contact users, (12) Close boat access, (17) Provide toilets, (18) Recreation host, (19) Construct boat ramp, (22) Redesign site, (26) Install facilities, (27) Limit group size, (29) Handicapped accessible, (37) Swimming beach water sample. (Close R.V. trail)
Middle Thompson	43	6	(17) Provide toilets.

Table D. - Continued

Lake Name	Site Number	Proposed ROC	Management Actions as Listed in Table C.
	64	6	(17) Provide toilets.
	Logan State Park		(22) Redesign site, (26) Install facilities, (29) Handicapped accessible, (36) Expand site.
Upper Thompson	28	6	(1) Eliminate present use, (17) Provide toilets, (19) Construct boat ramp, (22) Redesign site, (29) Handicapped accessible. (Day use only)
	29	5	(3) Limit family unit numbers, (4) Enforcement, (6) Restoration, (7) Pack In/Pack Out, (9) Limit length of stay, (11) Contact users, (12) Close boat access, (16) Eliminate cattle, (17) Provide toilets, (18) Recreation host, (22) Redesign site, (27) Limit group size, (32) Expand site.
	32	6	(17) Provide toilets.
Horseshoe	16	6	(3) Limit family unit numbers, (4) Enforcement, (6) Restoration, (7) Pack In/Pack Out, (8) Improve access, (9) Limit length of stay, (11) Contact users, (12) Close boat access, (17) Provide toilets, (18) Recreation host, (19) Construct boat ramp, (22) Redesign site, (26) Install facilities, (27) Limit group size, (33) Swimming beach water sample.
	16A	6	All management actions are the same as Site No. 16.
	16B	6	All management actions are the same as Site No. 16., except family units may be limited to one.
Loon	11	6	(3) Limit family unit numbers, (4) Enforcement, (6) Restoration, (7) Pack In/Pack Out, (8) Improve access, (11) Contact users, (12) Close existing boat access, (17) Provide toilets, (19) Construct boat ramp, (22) Handicapped accessible, (33) Swimming beach water samples.

All sites will receive the following management actions:

(4) Enforcement of regulations established for the TCL area.
(7) Pack In/Pack Out disposal regulations.
(10) Prohibit expansion of sites.
(11) Users may be contacted by FWP personnel.
(17) Toilets may be installed at sites where it is deemed necessary to protect the resource.
(26) Firerings may be installed where it is deemed necessary to protect the resource.

TABLE E: Option 3 - Diverse Management Opportunities

Lake	Site No.	Proposed ROC	Management Actions as Listed in Table C.
Mcgregor	1	6	(3) Limit family unit numbers, (4) Enforcement, (6) Restoration,
	1A	6	(7) Pack In/Pack Out, (8) Improve access, (9) Limit length of stay,
	1B	6	(12) Close existing boat access, (17) Provide toilets,
	2	6	(19) Construct boat ramp, (20) Need public access, (22) Redesign site,
	3	6	(26) Install facilities, (27) Limit group size, (29) Handicapped
	3A	6	accessible, (31) Close roads. (Sites 3 and 3A will be designed for boat access and day use.)
	5	-	(1) Obliterate site.
	6	-	(1) Obliterate site.
	8	6	(3) Limit family unit numbers, (4) Enforcement, (7) Pack In/Pack Out, (9) Limit length of stay, (10) Prohibit expansion.
	F S McGregor Lake Campground		(22) Redesign site, (32) Expand site.
Little McGregor	46	5	(3) Limit family unit number, (4) Enforcement, (7) Pack In/Pack Out, (8) Improve access, (9) Limit length of stay, (10) Prohibit expansion, (17) Provide toilets, (20) Need public access, (29) Handicapped accessible, (30) Survey boundary lines.
	66	-	(1) Close site.
	67	-	(1) Close site.
Lower Thompson	38 38A	6 6	(3) Limit family unit number, (4) Enforcement, (7) Pack In/Pack Out, (8) Improve access, (9) Limit length of stay, (12) Close existing boat access, (13) Install vehicle barriers, (16) Eliminate cattle, (17) Provide toilets, (19) Construct boat ramp, (26) Install facilities, (27) Limit group size.
	38B	6	(3) Limit family unit number, (4) Enforcement, (7) Pack In/Pack Out, (9) Limit length of stay, (13) Install vehicle barriers, (14) Tents only, (16) Eliminate cattle, (27) Limit group size, (31) Close roads. (Boat access only.)
	39	6	(3) Limit family unit number, (4) Enforcement, (6) Restoration, (7) Pack In/Pack Out, (9) Limit length of stay, (10) Prohibit expansion, (12) Close existing boat access, (13) Install vehicle barriers, (27) Limit group size, (28) Provide stock facilities.
	40	5	(3) Limit family unit number, (4) Enforcement, (9) Limit length of stay, (10) Prohibit expansion, (17) Provide toilets, (20) Need public access.
	40A	5	Same as Site No. 40.
	40B	6	(3) Limit family unit number, (4) Enforcement, (7) Pack In/Pack Out, (9) Limit length of stay, (10) Prohibit expansion.
	40C	5	Same as Site No. 40B.

Table E. - Continued

Lake	Site No.	Proposed ROC	Management Actions as Listed in Table C.
Lower Thompson	41	6	(3) Limit family unit number, (4) Enforcement, (7) Pack In/Pack Out, (9) Limit length of stay, (10) Prohibit expansion, (11) Contact users, (12) Close existing boat access, (17) Provide toilets.
	41A	6	Same as Site No. 41.
	41B	6	Same as Site No. 41.
	41C	6	Same as Site No. 41.
	42	7	(4) Enforcement, (6) Restoration, (7) Pack In/Pack Out, (9) Limit length of stay, (11) Contact users, (12) Close existing boat access, (17) Provide toilets, (18) Recreation host, (19) Construct boat ramp, (22) Redesign site, (26) Install facilities, (29) Handicapped accessible, (33) Swimming beach water sample. (Close RV trail.)
	59	5	(2) Seasonal closure (geese), (3) Limit family unit number, (4) Enforcement, (7) Pack In/Pack Out, (9) Limit length of stay, (10) Prohibit expansion, (20) Need public access. (April 1 - May 15)
	62	6	(3) Limit family unit number, (4) Enforcement, (7) Pack In/Pack Out, (9) Limit length of stay, (10) Prohibit expansion, (11) Contact users, (13) Install vehicle barriers, (27) Limit group size, (31) Close roads. (Boat access & walk-in only.)
Middle Thompson	36	6	(3) Limit family unit number, (4) Enforcement, (6) Restoration, (7) Pack In/Pack Out, (9) Limit length of stay, (10) Prohibit expansion, (11) Contact users, (17) Provide toilets, (27) Limit group size. (No. 6 is beach.)
	37	6	(3) Limit family unit number, (4) Enforcement, (7) Pack In/Pack Out, (9) Limit length of stay, (10) Prohibit expansion, (11) Contact users, (13) Install vehicle barriers, (27) Limit group size, (31) Close roads. (Boat access & walk-in only.)
	37A	-	(1) Close site.
	43	6	(3) Limit family unit number, (4) Enforcement, (7) Pack In/Pack Out, (9) Limit length of stay, (10) Prohibit expansion, (11) Contact users, (13) Install vehicle barriers, (26) Install facilities. (Close RV trail.)
	44	5	(3) Limit family unit number, (4) Enforcement, (7) Pack In/Pack Out, (9) Limit length of stay, (10) Prohibit expansion, (11) Contact users, (17) Provide toilets. (Carry in boat access only.)
	45	6	(3) Limit family unit number, (4) Enforcement, (7) Pack In/Pack Out, (9) Limit length of stay, (10) Prohibit expansion, (11) Contact users, (27) Limit group size. (Day use only. Carry in boat only.)
	60	5	(3) Limit family unit number, (4) Enforcement, (7) Pack In/Pack Out, (9) Limit length of stay, (11) Contact users. (Day use only. Carry in boat only.)
	64	6	(3) Limit family unit number, (4) Enforcement, (7) Pack In/Pack Out, (9) Limit length of stay, (10) Prohibit expansion, (11) Contact users, (17) Provide toilets, (27) Limit group size.
	--	7	Logan State Park - (22) Redesign site, (26) Install facilities, (29) Handicapped accessible, (36) Expand site.

Table E. - Continued

Lake	Site No.	Proposed ROC	Management Actions as Listed in Table C.
Upper Thompson	28	6	(4) Enforcement, (7) Pack In/Pack Out, (14) Tents only, (17) Provide toilets, (19) Construct boat ramp. (Day use only.)
	29	5	(3) Limit family unit number, (4) Enforcement, (7) Pack In/Pack Out, (9) Limit length of stay, (11) Contact users, (12) Close existing boat access, (14) Tents only, (15) Eliminate stock, (17) Provide toilets, (18) Recreation hosts.
	30	6	(3) Limit family unit number, (4) Enforcement, (7) Pack In/Pack Out, (9) Limit length of stay, (10) Prohibit expansion.
	32	6	(3) Limit family unit number, (4) Enforcement, (7) Pack In/Pack Out, (8) Improve access, (9) Limit length of stay, (10) Prohibit expansion, (11) Contact users, (19) Construct boat ramp, (20) Need public access.
	34	6	(3) Limit family unit number, (4) Enforcement, (7) Pack In/Pack Out, (9) Limit length of stay, (10) Prohibit expansion, (17) Provide toilets, (27) Limit group size. (Porta Potty)
	35	5	(3) Limit family unit number, (4) Enforcement, (7) Pack In/Pack Out, (9) Limit length of stay, (11) Contact users.
	47		(1) Close site.
	63		(1) Close site.
Crystal	25	6	(1) Close site. Relocate to N.E. shore.
	52	6	(1) Close site. Relocate to N.E. shore.
Horseshoe	15	5	(1) Close site, (6) Restoration. (Environment)
	16	6	(4) Enforcement, (6) Restoration, (7) Pack In/Pack Out, (8) Improve access, (9) Limit length of stay, (11) Contact users, (12) Close existing boat access, (17) Provide toilets, (18) Recreation hosts.
	16A	6	(3) Limit family unit number, (4) Enforcement, (6) Restoration, (7) Pack In/Pack Out, (8) Improve access, (9) Limit length of stay, (19) Construct boat ramp.
	16B	6	(3) Limit family unit number, (4) Enforcement, (6) Restoration, (7) Pack In/Pack Out, (8) Improve access, (9) Limit length of stay.
	17	6	(3) Limit family unit number, (4) Enforcement, (7) Pack In/Pack Out, (8) Improve access, (9) Limit length of stay, (10) Prohibit expansion, (11) Contact users, (12) Close existing boat access, (13) Install vehicle barriers, (17) Provide toilets, (27) Limit group size.
	17A	6	Same as Site No. 17.
	17B	6	Same as Site No. 17.
	17C	6	Same as Site No. 17.
	18	5	(3) Limit family unit number, (4) Enforcement, (7) Pack In/Pack Out, (8) Improve access, (9) Limit length of stay, (10) Prohibit expansion, (11) Contact users, (12) Close existing boat access, (13) Install vehicle barriers, (17) Provide toilets. (Porta Potty)

Table E. - Continued

Lake	Site No.	Proposed ROC	Management Actions as Listed in Table C.
	19	6	(3) Limit family unit number, (4) Enforcement, (7) Pack In/Pack Out, (9) Limit length of stay, (10) Prohibit expansion, (11) Contact users.
	20	6	(3) Limit family unit number, (4) Enforcement, (7) Pack In/Pack Out, (9) Limit length of stay, (10) Prohibit expansion.
	51	-	(1) Close site.
Cibid	49	6	(3) Limit family unit number, (4) Enforcement, (7) Pack In/Pack Out, (9) Limit length of stay, (10) Prohibit expansion. (Day use only.)
Banana	10	6	(3) Limit family unit number, (4) Enforcement, (7) Pack In/Pack Out, (9) Limit length of stay, (10) Prohibit expansion. (Day use only.)
Loon	11	6	(4) Enforcement, (6) Restoration, (7) Pack In/Pack Out, (8) Improve access, (9) Limit length of stay, (12) Close existing boat access, (17) Provide toilets, (22) Redesign site, (29) Handicapped accessible, (32) Expand site, (19) Construct boat ramp.
	14	6	(3) Limit family unit number, (4) Enforcement, (7) Pack In/Pack Out, (9) Limit length of stay, (10) Prohibit expansion, (17) Provide toilets. (Porta Potty)
	53	-	(1) Close site.
	56	6	(3) Limit family unit number, (4) Enforcement, (7) Pack In/Pack Out, (9) Limit length of stay, (10) Prohibit expansion.
Little Loon	12	5	(3) Limit family unit number, (4) Enforcement, (7) Pack In/Pack Out, (9) Limit length of stay, (10) Prohibit expansion, (17) Provide toilets. (Porta Potty)
	55	-	(1) Close site.
Leon	13	5	(3) Limit family unit number, (4) Enforcement, (7) Pack In/Pack Out, (9) Limit length of stay, (10) Prohibit expansion, (17) Provide toilets.
	54	-	(1) Close site.

STEP 8: EVALUATION AND SELECTION OF A PREFERRED OPTION

In this step, the recreation opportunity class and a recommended management option is selected. With the allocation of the recreation opportunity classes, and development of an area management plan, a recommended alternative is selected.

A review of the 1991 and 1993 inventory forms and maps indicates that nearly all lands administered by the State and Plum Creek Timber suitable for recreation occupancy adjacent to the waters accommodate some type of recreation use. This occupancy has occurred throughout the years without any administrative controls. Use has increased within recent times and additional occupancy sites are occurring.

As a result, several of the major lakes are becoming ringed with recreation occupancy sites. Some sites are receiving extensive heavy use resulting in site deterioration and overcrowding. This overcrowding and lack of developed sites may be one cause of the proliferation of new occupancy sites.

The review team reviewed the three options, the TCL management plan, analyzed all the data and selected Option #3 as the recommended management program for the TCL area.

STEP 9: ACTION IMPLEMENTATION AND MONITORING PLAN

With the selection of a management program, the program must be implemented and its performance assessed. The purpose of a monitoring plan is to: 1) Determine if the management plan is achieving the objectives of the selected option; 2) identify and record where recreation changes are occurring; and 3) record what and where management actions are and are not successful.

If monitoring shows that conditions meet the accepted standards, then current actions can remain the same. If however, monitoring indicates that management actions do not maintain or improve acceptable conditions established in the plan, four alternative actions may have to be considered to bring the two into compliance.

They are: 1) Modify behavior, 2) modify the site, 3) modify use or 4) lower the standards. The latter may require a change in the objective established in the selected option.

Monitoring is accomplished to provide the following information on an annual basis:

1. Identify sites where recreation use routinely exceeds the standards established for the site. (Holiday weekends are not considered routine time periods.)

2. Identify closed sites that continue to be used.

3. Identify and map new sites found on State and Plum Creek lands.

4. Identify and map existing sites where it appears excessive use is causing increasing site deterioration.

5. Identify areas where major recreation changes is occurring.

6. Acquire samples of lake water at designated recreation use sites monthly during the use season.

Monitoring shall occur on State lands only, except items number 3 and 5.

Upon completion of the monitoring program, Recreation Managers will need to determine which sites, if any, may need a more intensive re-inventory essentially a repeat of Step 4.

Instructions for monitoring and the site inventory processes is located in Appendix E.

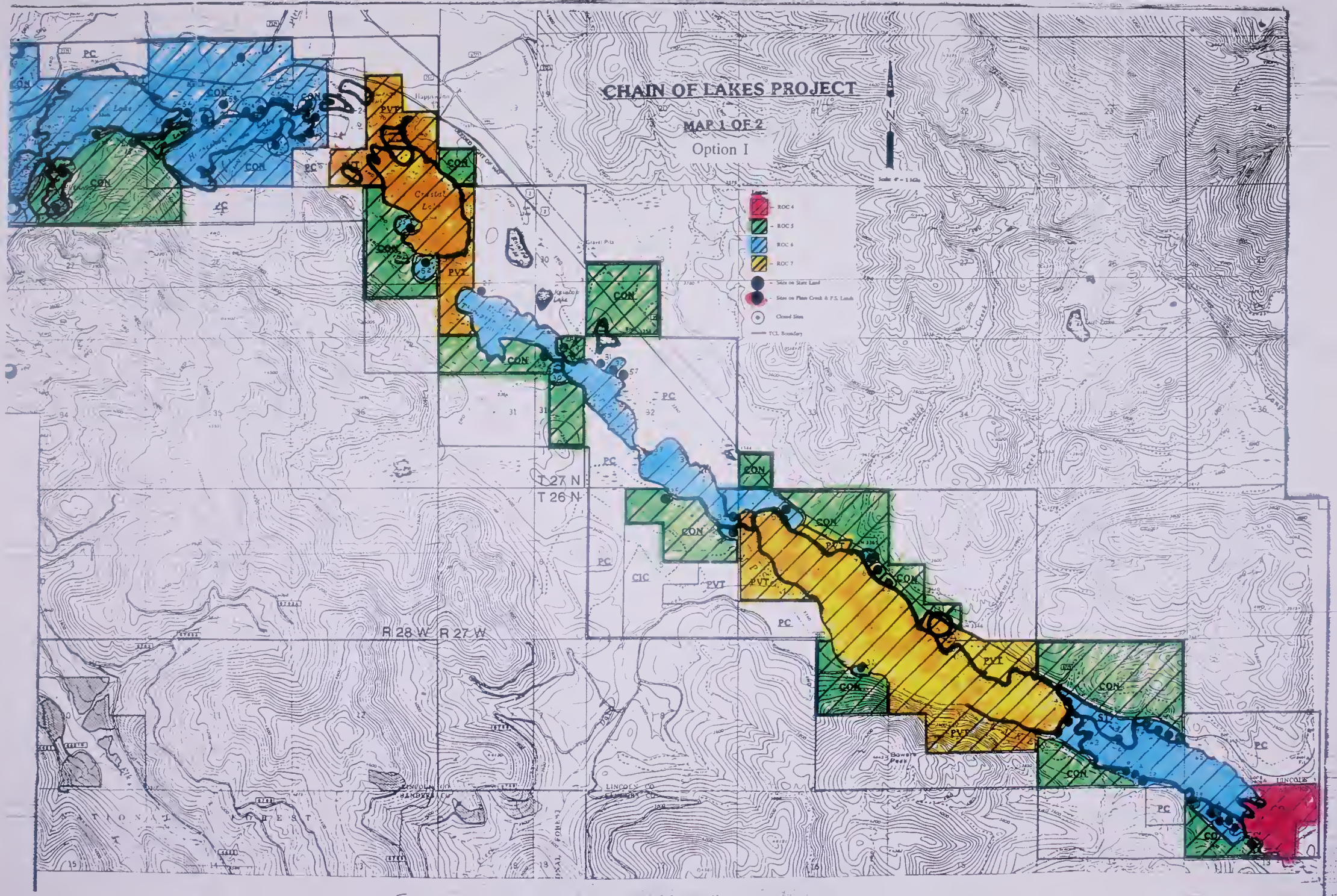
An important management action not addressed in this survey in the recreation use numbers or visitor carrying capacity for the TCL. This is a very important action which should be addressed in the future.

A system for reviewing, analyzing, evaluating and formulating action plans is shown in Appendix F.

(REF:NB28WW.94D)

Appendix A

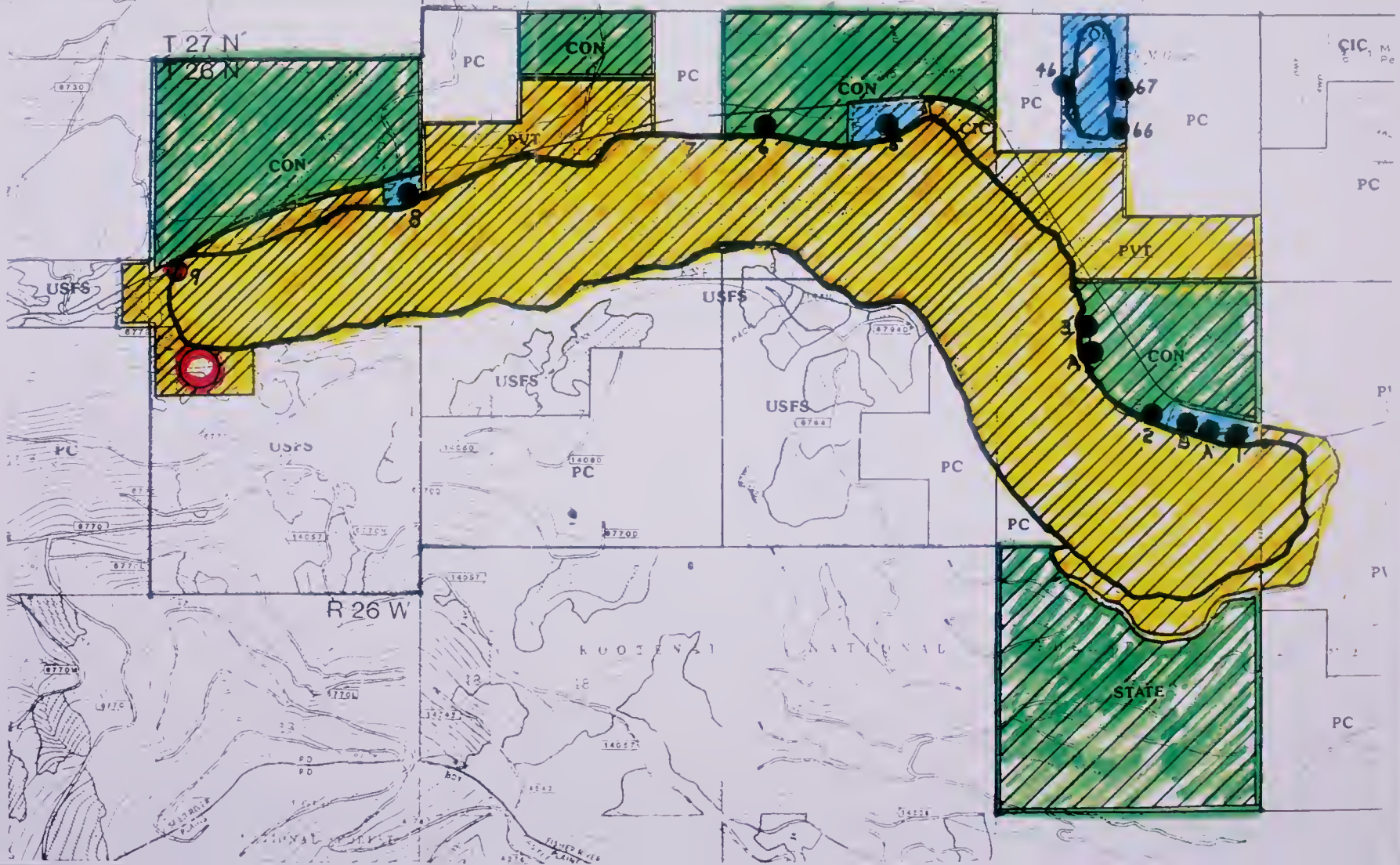
Management Option Maps - Options 1, 2 & 3

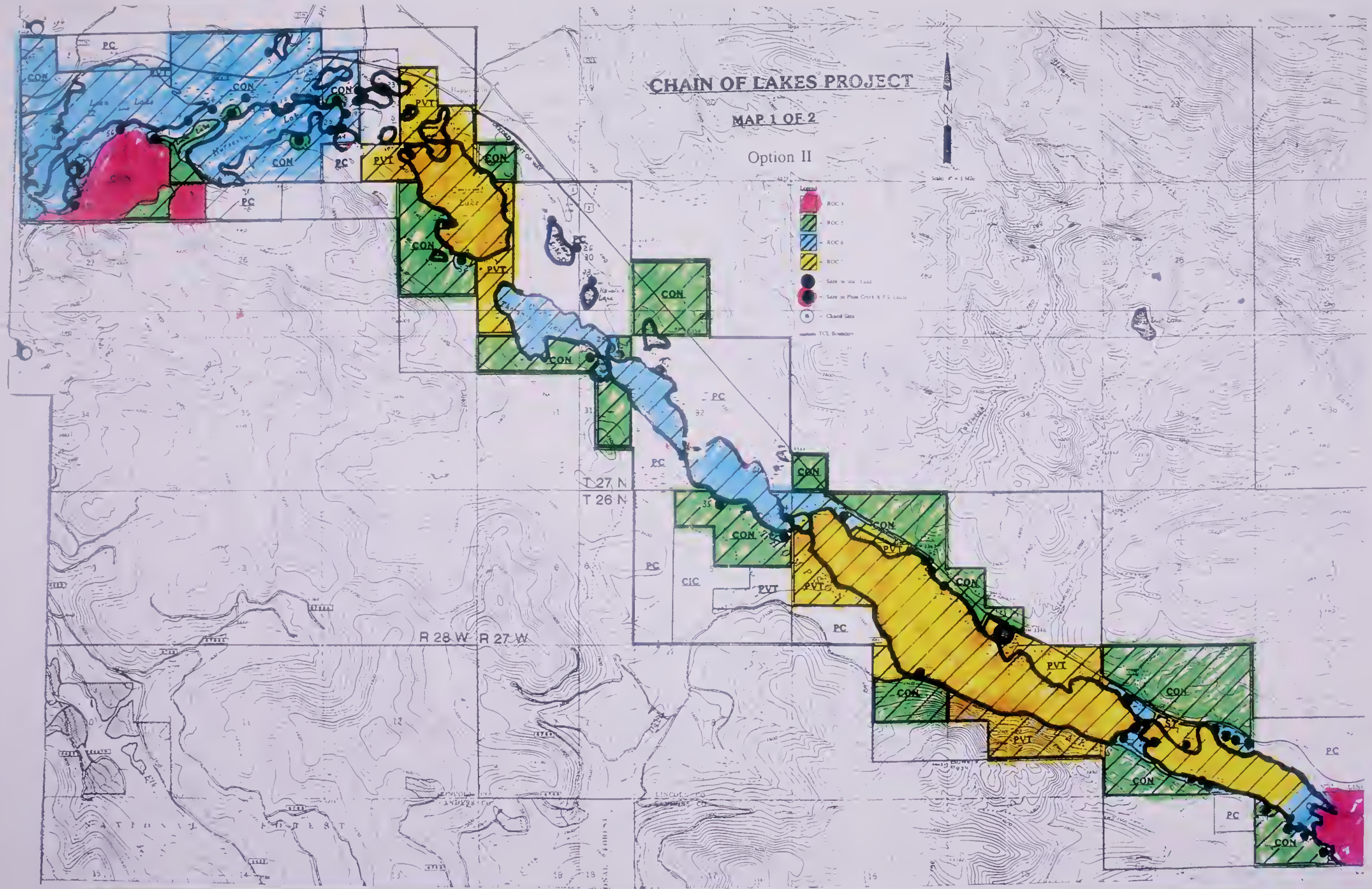

CHAIN OF LAKES PROJECT
MAP 1 OF 2
Option I
N
Scale: 6" = 1 Mile
ROC 4
ROC 5
ROC 6
ROC 7
Sites on State Land
Sites on Plum Creek & F.S. Lands
Closed Sites
TCL Boundary
T 27 N
T 26 N
R 28 W
R 27 W
CON
PVT
PC
CIC
Gravel Pits
Happy Jack
Crystal Lake
Kreutzer Lake
Bowers Peak
LINCOLN CO
SANDERS CO
NATIONAL FOREST

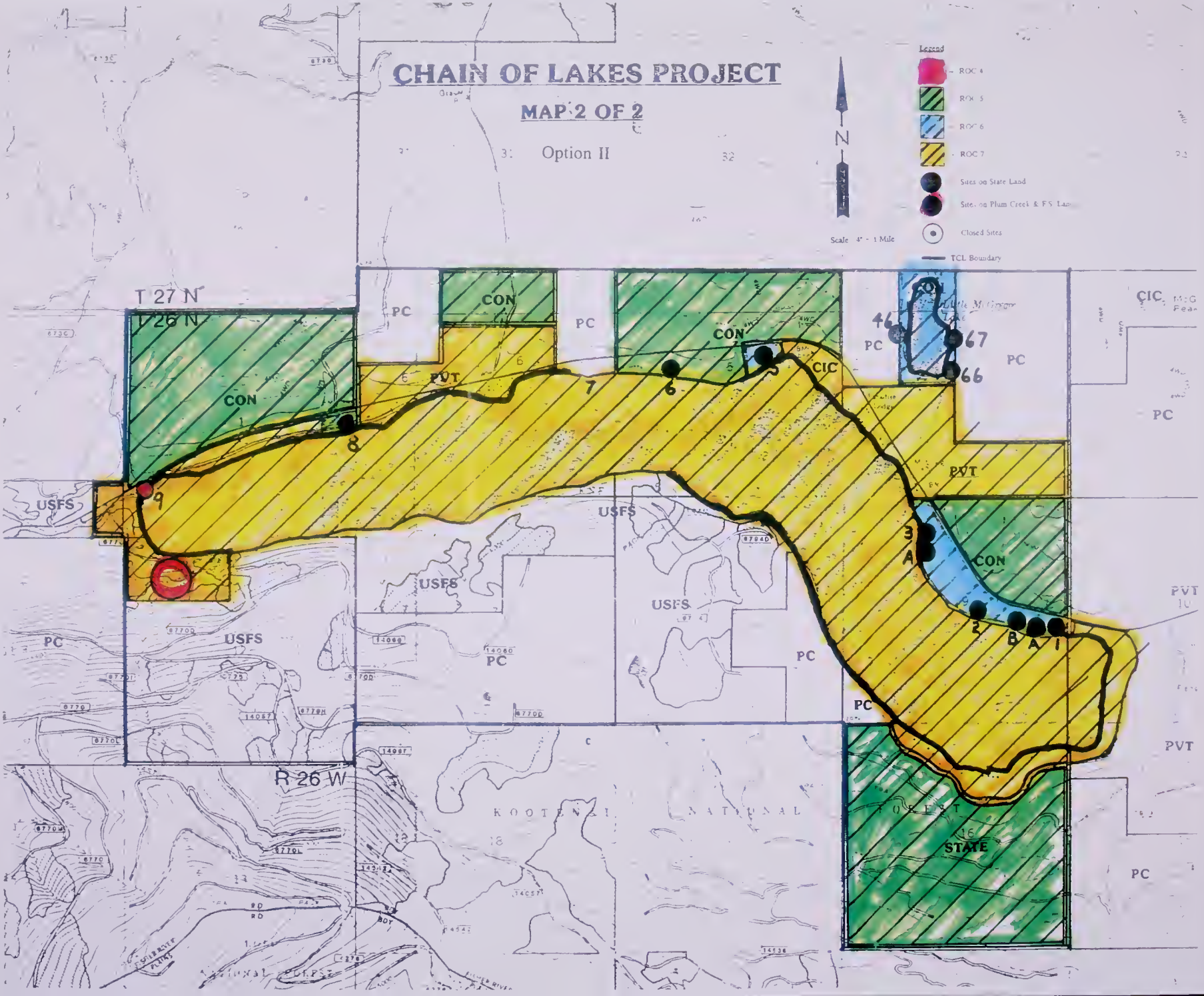
CHAIN OF LAKES PROJECT

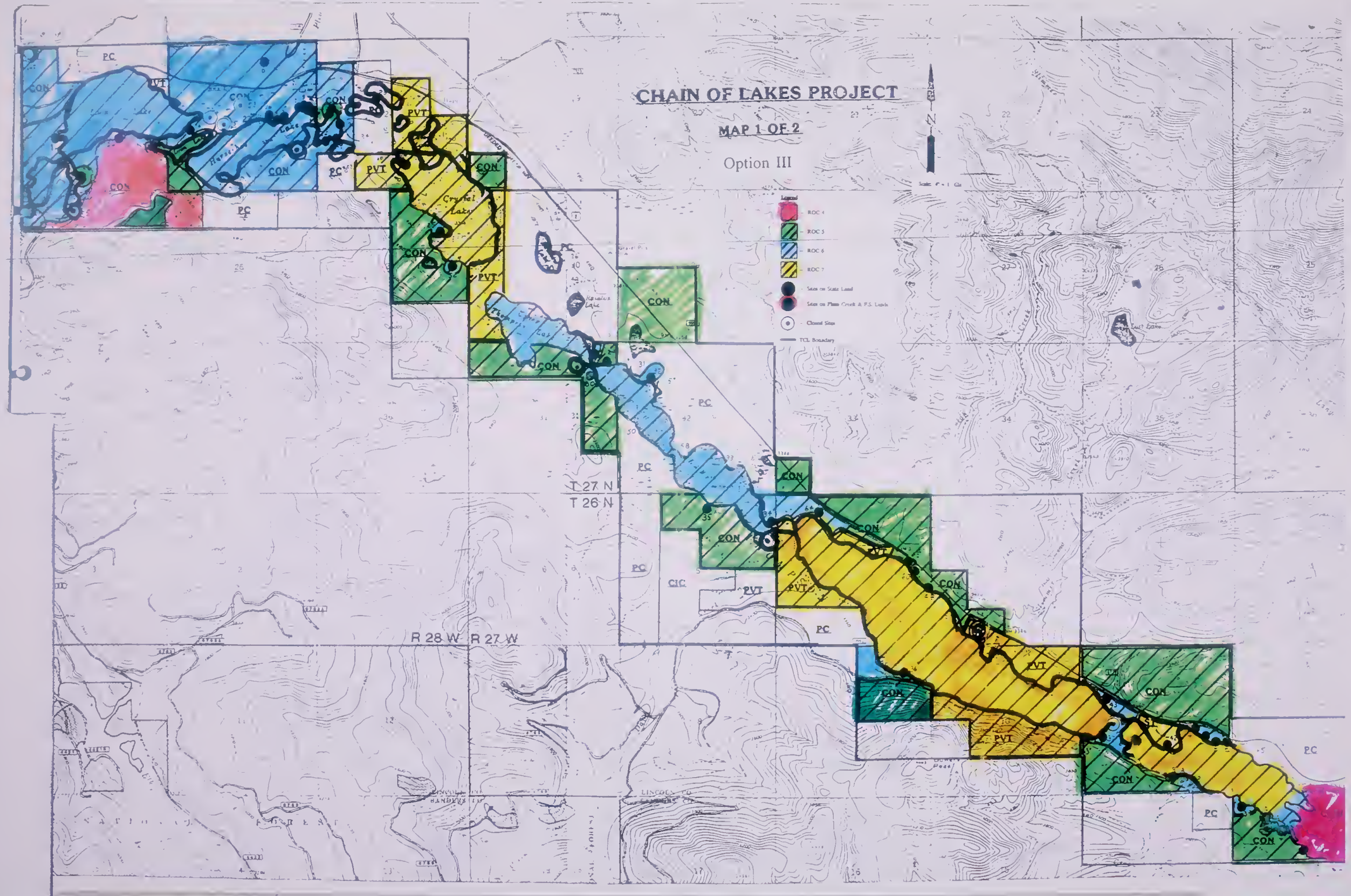
MAP 2 OF 2

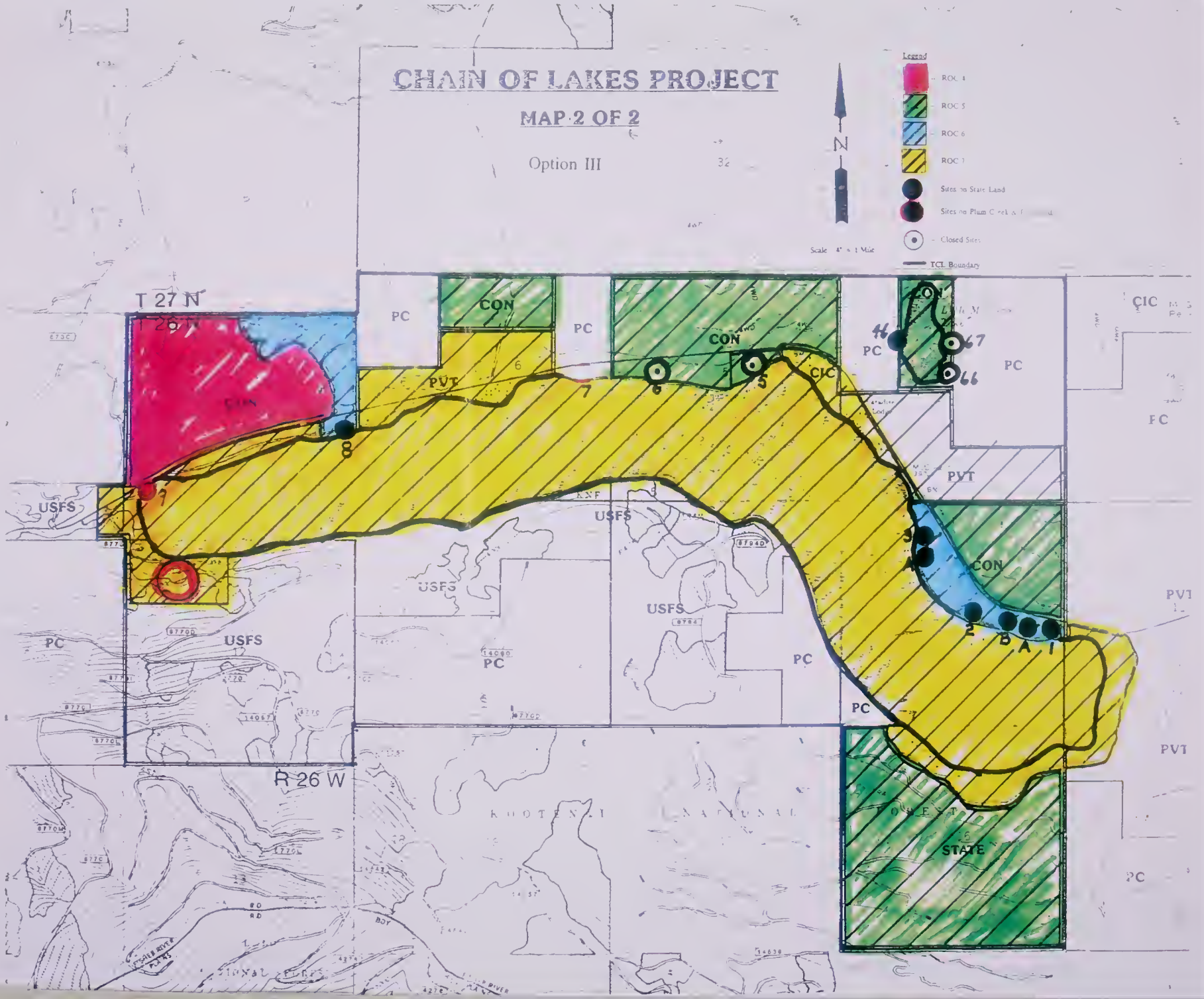
Option I




CHAIN OF LAKES PROJECT
MAP 1 OF 2
Option II
Legend
ROC 4
ROC 5
ROC 6
ROC 7
Sales in Your Land
Sales in Plum Creek & F.S. Lands
Closed Sales
TCL Boundary
Scale: 4" = 1 Mile
T 27 N
T 26 N
R 28 W
R 27 W
CON
PVT
PC
CIC


CHAIN OF LAKES PROJECT
MAP 2 OF 2
Option II
Legend
ROC 4
ROC 5
ROC 6
ROC 7
Sites on State Land
Sites on Plum Creek & FS Land
Closed Sites
TCL Boundary
N
Scale 4" = 1 Mile
T 27 N
T 26 N
R 26 W
CON
PC
PVT
CIC
USFS
STATE
KOOTENAI NATIONAL FOREST
Little McGregor Lake
1
2
3
4
5
6
7
8
9
A
B
46
66
67


CHAIN OF LAKES PROJECT
MAP 1 OF 2
Option III
N
Legend
ROC 4
ROC 5
ROC 6
ROC 7
Sites on State Land
Sites on Plum Creek & P.S. Lands
Closed Sites
TCL Boundary
T 27 N
T 26 N
R 28 W
R 27 W
PC
CON
PVT
CIC
Crystal Lake
Thompson Lake
Hanging Lake
Lake
7


CHAIN OF LAKES PROJECT
MAP 2 OF 2
Option III
N
Legend
ROC 4
ROC 5
ROC 6
ROC 7
Sites on State Land
Closed Sites
TCL Boundary
T 27 N
R 26 W
PC
CON
PVT
CIC
USFS
KNF
STATE
KOOTENAI NATIONAL FOREST
A
B
1
2
5
6
7
8
9
44
66
67

APPENDIX B

Changes in ROCs. Standards changes
N/A = Close sites
✓ = Meets standards
x = Does not meet standards
Does not include Plum Creek Timber Lands.

	Recreation Opportunity Class Changes				Options Meet Standards		
Lake & Site No.	Existing	Option #1	Option #2	Option #3	Option #1	Option #2	Option #3
McGregor							
1	6	6	6	6	x	x	x
1A	6	6	6	6	x	x	x
1B	6	6	6	6	x	x	x
2	5	5	6	6	x	✓	✓
3	5	5	6	6	✓	x	x
3A	5	5	6	6	✓	x	x
5	6	6	6	N/A	✓	✓	✓
6	5	5	5	N/A	x	x	✓
8	6	6	6	6	x	x	x
F.S. McGregor Lake Campground	7	7	7	7	✓	✓	✓
Little McGregor							
46	6	6	6	5	x	x	x
66	6	6	6	N/A	x	x	✓
67	6	6	6	N/A	x	x	✓
Lower Thompson							
38	6	6	6	6	x	x	x
38A	6	6	6	6	✓	✓	✓
38B	6	6	6	6	x	x	x
39	6	6	6	6	✓	✓	✓
40	5	5	5	5	✓	✓	✓
40A	5	5	5	5	x	x	x
40B	6	6	6	6	x	x	x
40C	5	5	5	5	✓	✓	✓
41	6	6	6	6	✓	✓	✓

Appendix B - Continued

	Recreation Opportunity Class Changes				Options Meet Standards		
Lake & Site No.	Existing	Option #1	Option #2	Option #3	Option #1	Option #2	Option #3
41A	6	6	6	6	x	x	x
41B	6	6	6	6	x	x	x
41C	6	6	6	6	✓	✓	✓
42	6	6	7	7	x	✓	✓
59	5	5	5	5	✓	✓	✓
62	6	6	6	6	✓	✓	✓
Middle Thompson							
36	6	6	6	6	✓	✓	✓
37	6	6	6	6	x	x	x
37A	6	6	6	N/A	✓	✓	✓
43	6	6	6	6	x	x	x
44	5	5	5	5	x	x	x
45	6	6	6	6	✓	✓	✓
60	5	5	5	5	✓	✓	✓
64	6	6	6	6	x	x	x
Logan State Park	7	7	7	7			
Upper Thompson							
28	6	6	6	6	x	x	x
29	5	5	5	5	x	✓	x
30	6	6	6	6	✓	✓	✓
32	6	6	6	6	x	x	x
34	6	6	6	6	x	x	x
35	5	5	5	5	✓	✓	✓
47	6	6	6	N/A	x	x	✓
63	5	5	5	N/A	x	x	✓
Crystal							
25	6	6	6	6	✓	✓	✓
52	6	6	6	6	✓	✓	✓

Appendix B - Continued

	Recreation Opportunity Class Changes				Options Meet Standards		
Lake & Site No.	Existing	Option #1	Option #2	Option #3	Option #1	Option #2	Option #3
Horseshoe							
15	5	5	5	N/A	x	x	✓
16	5	5	6	6	x	✓	✓
16A	5	5	6	6	x	✓	✓
16B	5	5	6	6	✓	✓	✓
17	6	6	6	6	x	x	x
17A	6	6	6	6	x	x	x
17B	6	6	6	6	x	x	x
17C	6	6	6	6	✓	✓	✓
18	5	5	5	5	x	x	x
19	6	6	6	6	x	x	x
20	6	6	6	6	✓	✓	✓
51	5	5	5	N/A	✓	✓	✓
Cibid							
49	6	6	6	6	✓	✓	✓
Banana							
10	6	6	6	6	✓	✓	✓
Loon							
11	6	6	6	6	✓	✓	✓
14	6	6	6	6	✓	✓	✓
53	6	6	6	N/A	x	x	✓
56	6	6	6	6	x	x	x
Little Loon							
12	5	5	5	5	x	x	x
55	6	6	6	N/A	✓	✓	✓
Leon							
13	5	5	5	5	x	x	x
54	6	6	6	N/A	✓	✓	✓

APPENDIX C

Changes in ROC and Development Scale totals for the different options. Does not include Plum Creek Timber Lands.

ROC	Existing	Option #1	Option #2	Option #3	Development Scale	Existing	Option #1	Option #2	Option #3
McGregor Lake									
5	4	4	1	0	1	9	9	3	1
6	5	5	8	7	2	0	0	0	0
7	1	1	1	1	3	1	1	7	7
Little McGregor									
5	0	0	0	1	1	3	3	3	0
6	3	3	3	0	2	0	0	0	1
Lower Thompson									
5	4	4	4	4	1	9	9	9	2
6	6	6	6	5	2	3	3	3	0
7	1	1	1	1	3	1	1	1	9
Upper Thompson									
5	4	4	3	2	1	7	7	6	2
6	4	4	5	4	2	1	1	0	0
7	0	0	0	0	3	0	0	3	5
Crystal									
6	2	2	2	2	1	2	2	2	1
Horseshoe									
5	6	6	3	1	1	11	11	8	0
6	6	6	9	9	2	1	1	4	2
7	0	0	0	0	0	0	0	0	8
Cibid									
6	1	1	1	1	1	1	1	1	1
Banana									
6	1	1	1	1	1	1	1	1	1
Loon									
6	4	4	4	3	1	4	4	3	2
7	0	0	0	0	3	0	0	1	1
Little Loon									

Appendix C - Continued

ROC	Existing	Option #1	Option #2	Option #3	Development Scale	Existing	Option #1	Option #2	Option #3
5	1	1	1	1	1	2	2	2	0
7	0	0	0	0	2	0	0	0	1
Leon									
5	1	1	1	1	1	2	2	2	1
6	1	1	1	0	2	0	0	0	0

APPENDIX D

Literature Reviewed

Thompson Chain of Lakes Management Plan and Environmental Assessment. Montana Department of Fish, Wildlife and Parks. November 1993.

Thompson Chain of Lakes, Management Plan and Environmental Assessment. Montana Debarment of Fish, Wildlife and Parks. July 1, 1993.

The Limits of Acceptable Change (LAC) System for Wilderness Planning. Stankey, Cole, Lucas, Peterson and Frissell, USFS Intermountain Forest and Range Experiment Station, Ogden, UT 84401, General Technical Report INT-176. January, 1985.

Ideas for Limits of Acceptable Change Process, Book Two. Publication #229, Watson, Cole, USFS Intermountain Research Station, Missoula, MT 59812. 1992.

Wilderness Campsite Impacts: Do Managers and Visitors See Them the Same? Martin, McCool, Lucas, School of Forestry, University of Montana, USFS Intermountain Research Station, Missoula, MT 59812. 1989.

Modeling Wilderness Campsites: Factors That Influence Amount of Impact. Cole, USFS Intermountain Research Station, Missoula, MT 59807.

Bob Marshall Great Bear, Scapegoat Wilderness, Recreation Management Direction. USFS Forest Service, Flathead, Lolo, Helena, Lewis and Clark National Forests. April 1987.

Recreation Opportunity Spectrum (ROS) Users Guide. U.S. Department of Agriculture, Forest Service Handbook.

Recreation Opportunity, Inventory and Evaluation (ROI). U.S. Department of Agriculture, Forest Service, Northern Region, Recreation and Lands, R-1 74 006. June 1974.

Managing Wilderness Recreation Use: Common Problems and Potential Solutions. Cole, Petersen, Lucas, USFS Intermountain Research Station, Ogden. UT 944-1. General Technical Report INT-230. August 1987.

Assessing Forest Service Recreation Trends with Shift-share Analysis. Schuster, Intermountain Research Station, Forestry Science Laboratory, Missoula, MT 59812, Research Note INT-404. June 1992.

Area of Vegetation Loss: A New Index of Campsite Impact. David N. Cold, USFS Intermountain Research Station, Ogden, UT 84401, Research Note, INT-389, July 1998.

Wilderness Campsite Monitoring Methods: A Sourcebook. David N. Cole, USFS Intermountain Research Station, UT 84401, General Technical Report INT-259, April 1989.

Dispensed Recreation Impact Management Process: Anderson, Manley, Sawyer, College of Forestry & Natural Resources, Dept. of Recreation Resources, Colorado State University, For: Arapaho and Roosevelt National Forest. Dec. 17, 1986.

APPENDIX E

Site Monitoring Instructions

Site monitoring should be performed as many times during the use season as the Recreation Managers feel is needed to acquire the information necessary to evaluate recreation use at the established sites. Monitoring frequencies may change from year to year depending on established and changing goals and objectives for the TCL area.

If new sites are found, they can be identified using Form 1 and monitored throughout the remainder of the monitoring period. New sites should also be inventoried as soon as possible by following the Site Inventory Instructions, p. 37.

Form 1

1. Recreation Mangers list planned ROC's and planned number of family units (C.U.) for each site. The existing numbers for Plum Creek Timber and The Forest Service are preprinted on the forms. The Department of Fish, Wildlife and Parks has no management authority on these private lands, but will monitor them to acquire knowledge of the use of these sites.

2. Maps showing site numbers and locations should be carried when monitoring sites to insure proper locations.

3. Sites should be visited on weekends and weekdays to insure a good sample is taken. However, weekend should be monitored more often as past experience has shown that this is when most of the recreational activity takes place and when over use may take place.

4. Count the number of camper units at each site, note the date and day in the columns provided. If there are no camper unites at the site, enter a zero and mark date and day. A camper unit is approximately four people either camping or involved in a day use activity. One camper unit may use a camping trailer, a motor home or a pick-up camper. A tent could also represent a camper unit, however, in some instances tents are also used by family members associated with the major camping unit. In many instances, several families camp together as a group. Your best estimate and judgement is used to determine the total number of camper units. If it appears that they are all in a group, make a note on the back of the form giving the site number, day and date.

   All sites on State, Plum Creek and Forest Service lands should be monitored and data collected.

5. It is not necessary that all sites be visited and monitored on the same date, nor that a column represent the same date for all sites. One set of forms could last for several separate visits.

6. Dated comments by sites may be made on the back of the forms at any time.

7. Be on the lookout for new sites at all times. Prepare inventory, Form 2, using the Site Inventory Instructions which follow these instructions. Consult with Recreation Managers when this should be done.

8. Monitors should take special notice if sites are being heavily overused, notice the amount of trash, resource damage, conflicts and the sites where bare ground area may be increasing in size. Notations of these sites should be noted on the forms back.

9. At the end of the major recreation use season, usually after Labor Day, Recreation Managers should review the monitoring forms with the monitor. Sites which appeared to increase or decrease in size should be reviewed on the ground and new site inventory maps prepared if warranted. New sites not previously inventoried should be completed at this time. Follow the Site Inventory Instructions.

Form 1

THOMPSON CHAIN OF LAKES
Site Monitoring

Montana Department of Fish, Wildlife & Parks

Established Data			Number of F.U.'s and Dates					
Lake & Site Number	Planned ROC	Planned Number of F.U.'s						
McGregor								
1								
1A								
1B								
2								
3								
3A								
5								
6								
7 P.C.	6	2						
8	6	3						
9 F.S.								
Little McGregor								
46								
66								
67								
Lower Thompson								
38								
38A								
38B								
39								
40								

P.C. = Plumb Creek Timber
F.S. = Forest Service (U.S.)
Planned ROC & Number of F.U. - From Established Management Option

Continuation of Form 1

Established Data			Number of F.U.'s and Dates					
Lake & Site Number	Planned ROC	Planned Number of F.U.'s						
40A								
40B								
40C								
41								
41A								
41B								
41C								
42								
59								
62								
65 P.C.	6	2						
Middle Thompson								
36								
37								
37A								
43								
44								
45								
60								
64								
Upper Thompson								
27 P.C.	6	1						
28								
29								

P.C. = Plumb Creek Timber
F.S. = Forest Service (U.S.)
Planned ROC & Number of F.U. - From Established Management Option

Continuation of Form 1

Established Data			Number of F.U.'s and Dates					
Lake & Site Number	Planned ROC	Planned Number of F.U.'s						
30								
31 P.C.	5	1						
32								
33 P.C.	5	4						
34								
35								
47								
50 P.C.	5	4						
57 P.C.	5	1						
58 P.C.	5	1						
61 P.C.	6	1						
63								
Rainbow								
26 P.C.	5	1						
26A P.C.	5	1						
Lower Rainbow								
48 P.C.	5	1						
Crystal								
25								
52								
Horseshoe								
15								
16								

P.C. = Plumb Creek Timber
F.S. = Forest Service (U.S.)
Planned ROC & Number of F.U. - From Established Management Option

Continuation of Form 1

Established Data			Number of F.U.'s and Dates					
Lake & Site Number	Planned ROC	Planned Number of F.U.'s						
16A								
16B								
17								
17A								
17B								
17C								
18								
19								
20								
21 P.C.	5	2						
51								
Cibid								
22 P.C.	5	1						
49								
Topless								
23 P.C.	6	1						
Cad								
24 P.C.	5	0						
Banana								
10								
Loon								
11								
14								

P.C. = Plumb Creek Timber
F.S. = Forest Service (U.S.)
Planned ROC & Number of F.U. - From Established Management Option

Continuation of Form 1

Established Data			Number of F.U.'s and Dates					
Lake & Site Number	Planned ROC	Planned Number of F.U.'s						
53								
56								
Little Loon								
12								
55								
Leon								
13								
54								

P.C. = Plumb Creek Timber
F.S. = Forest Service (U.S.)
Planned ROC & Number of F.U. - From Established Management Option

Site Inventory Instructions

Equipment Needs

Area map showing site locations and numbers, development scale criteria (p. 9 of report), copy of previous site inventory map, blank inventory Form #2, measuring wheel, 100-foot measuring tape, engineer measure scale, compass, plastic triangle, calculator, pen or pencil, drafting tape, small drafting board and camera.

The inventory can be performed by one person, however, larger, more complicated sites such as Sites 42, 43, 16, 17 and others should be done by two persons to insure a more accurate map.

Form 2

1. Review existing inventory form and fill in lake name, site number, ownership and date on new Form 2. The ROC is filled in as determined in the management plan for the site. Review development scale criteria, and fill in proper blank.

2. Walk over site and note ground cover, shade percentages, amount of trash, resource damage, conflicts (cattle, highway noise, noise and sight from nearby camp units, etc.) and estimated number of F.U.'s. Fill in proper blanks. Note any comments on back of form or separate paper. Note site number, date and day.

3. When mapping, use same scale as previous map if possible. Draw in north arrow.

4. Review existing map and locate imaginary base line. These are usually located between permanent objects such as trees, rocks, or stumps. Some are not tied in to permanent objects, but may be located by orienting the map to the site and recognizing object along the line of sight. Some smaller sites do not have a base line shown. In such cases you may establish your own and show it on the map. On smaller sites, a compass may be used by marking bearing and distances between trees or other objects.

5. Determine use area. There is usually a noticeable line between depressed grass and shrubs and natural vegetation which is readily seen. Be aware of this line when measuring.

6. Determine bare core ground. Complete lack of any live vegetation. Pine needles are not ground cover.

7. Starting at one end of the base line and with the measuring wheel, measure along the base line until an object at right angles to the base line is reached. This could be a tree, stump, toilet, lake edge, fireplace; use area edge, bare ground edges, etc. Measure at right angles to the base line to the object. Using engineer scale, locate on map. If you use measuring wheel to measure the distance, mark the spot on the base line so you can

return to the same spot to continue along the baseline. Another option is to use the 100 ft measuring tape. If this is an existing site, you may wish to use the same objects. If the site received heavy use, the area boundary or base core area could extend over the areas shown on the existing maps.

8. Return to spot on baseline and continue along baseline until the next object at right angles is reached. Mark distance on map. Measure at right and angles to baseline to the object. Mark on map. You may wish to return the mark to zero on the wheel before each new measurement is taken.

9. Repeat steps 7 and 8 until the end of the selected area is reached.

10. Take photo from identified photo point and mark on map. If this is a new site, select a photo point and mark on map.

11. Complete maps by drawing in water edge, area boundary, bare core ground area and other objects identified during the survey.

12. Identify the base core ground area by cross hatching or dotting as shown on the existing map.

13. Mark the area size and bare ground size on Form 2 by counting the appropriate square feet shown on the form to arrive at the correct figure.

14. Re-mapping of sites on P.C. lands will be done at the discretion of the Recreation Managers.

Montana Department of Fish, Wildlife & Parks

LAKE NAME: _____. SITE NO. ____. OWNERSHIP: _____.
RECREATION OPPORTUNITY CLASS: ____. DEVELOPMENT SCALE: _____.
A SIZE(sq. ft.): _____. BARE GROUND(sq. ft.): _____.
ND COVER: _____. SHADE (%): _____. TRASH: _____.
URCE DAMAGE: _____. CONFLICTS: _____.

DATE: _____.

COMMENTS: _____

☐ = _____ Sq. Ft.

SCALE: 1" = _____ FEET.

LEGEND.

= Area Boundary

= Fireplace

= Trail

= Bare Ground

= Secondary Fireplace

= Human Waste Area

= Trees, Stumps

= Access Road

→ Photo Point

LAKE NAME: Lower Thompson. SITE NO. 38A:8 OWNERSHIP: State
RECREATION OPPORTUNITY CLASS: R6. DEVELOPMENT SCALE: 2
AREA SIZE(sq. ft.): 12,100. BARE GROUND(sq. ft.): 10,900
GROUND COVER: Grass, Forbs, Shrubs. SHADE (%): 90. TRASH: None
RESOURCE DAMAGE: Nails + Axe to trees. CONFLICTS: Hwy. 2 + ACM road

N

DATE: 9-14-93.

☐ = 100 Sq. Ft.

COMMENTS: 4 FU. Very Heavy Use. May get more than 4 at times

SCALE: 1" = 40 FEET.

LEGEND.

- - = Area Boundary
= Bare Ground
⊙ = Trees, Stumps
▥ = Fireplace
◌ = Secondary Fireplace
— = Access Road
= Trail
☒ = Human Waste Area
✳→ Photo Point

APPENDIX F

Formulating Action Plans

The Recreations Management Action Process, Figure 2, was developed to assist the managers in formulating solutions to problems associated in meeting the goals established in the approved management plan for TCL. The monitoring program developed in Appendix E is a key in the process.

1. Monitor the areas utilizing Forms 1 and 2 in Appendix E.

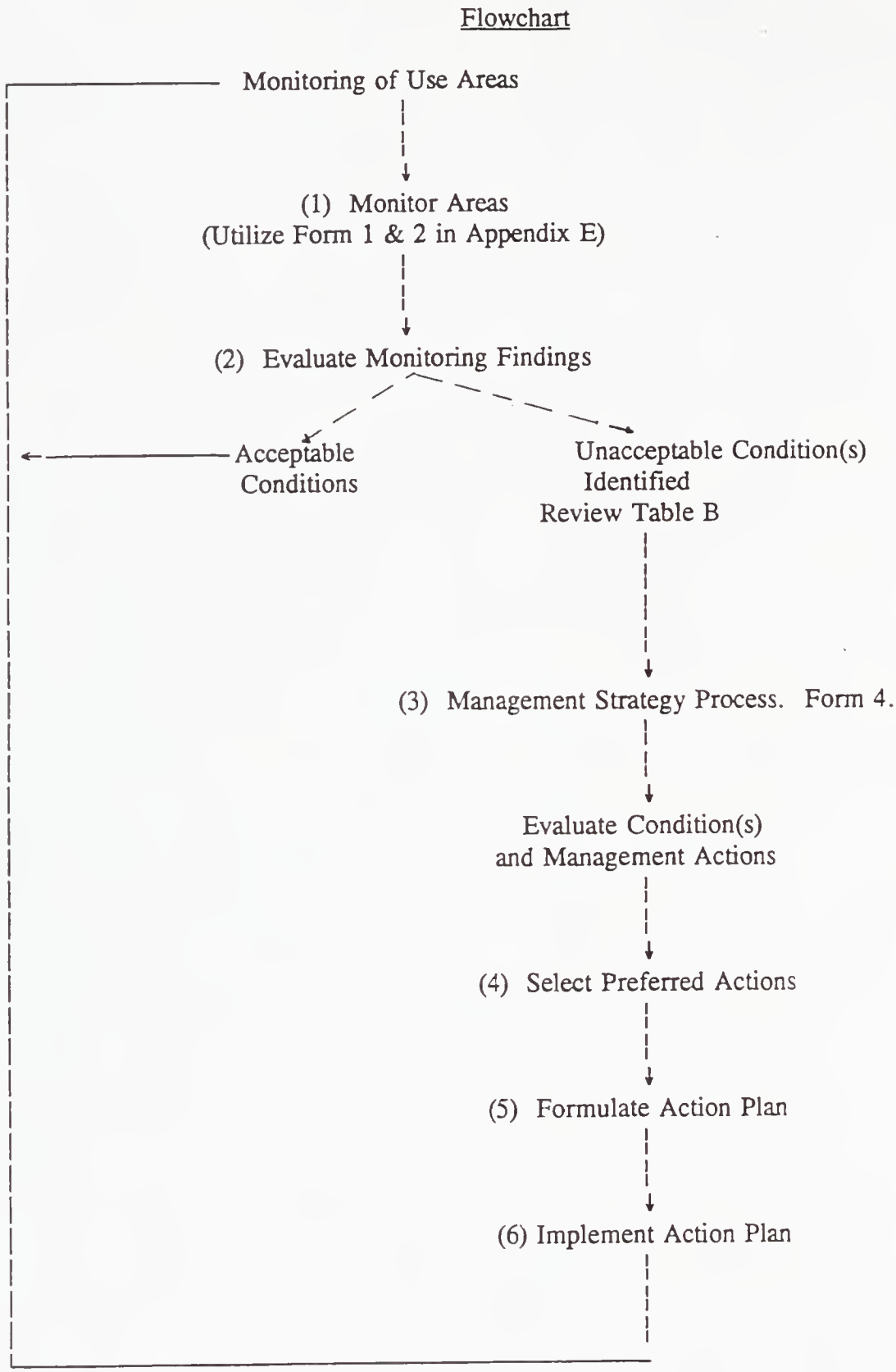
2. Managers evaluate the monitoring finding to determine if they are acceptable or unacceptable. If no unacceptable conditions are found, then no other management action is required except continual monitoring. If unacceptable conditions are identified, then mitigating management actions are required.

3. Management Strategy Process, Form 4. To complete the matrix form (Form 4), the manager begins by filling in the information in the upper left hand corner. This information helps to organize the data and identify key elements such as the specific area, the opportunity class, the area objective or the unacceptable impacts being assessed (this matrix can be used to determine preferred actions to meet an area's objective or for solutions to a particular impact). When completing the matrix portion, special notice should be taken of the opportunity class and objective as this will have some influence on the determination of values assigned to each action. Some actions will have a higher or lower value for a particular decision criteria based on these classifications. For example, a management action or an action such as expanding the site would not be conducive to an area managed as an Opportunity Class 4 area. Whereas, in an Opportunity Class 7 these techniques might be acceptable.

   At the bottom of the chart are the management action ranking scale and the decision and the decision criteria weighting scale. Both scales are based on a 1 to 3, least to most value system. The action ranking scale is least to most applicable and is used to obtain a subjective value for a particular action. On the other hand, the weighting scale is lease to most important. The Weighting scale is meant to differentiate which criteria are judged to be most influential in making a decision. This will help to eliminate the potential problem of arguments over whether one criteria is of as equal importance as another when scores are totaled. Both scales could be numerically expanded if deemed necessary or more important.

   The main section of the matrix is comprised of rows and columns making up separate cells. Each cell is divided into an upper and lower half. The upper half is for raw scores, which are initially decided upon by those concerned. The lower half is for weighted scores, which are derived by multiplication of the raw score and the weighting factor. The weighted score will reflect the greater or lesser importance placed on specific decision criteria.

Figure 2. Recreation Management Action Process



The main section has two major headings. The first, management actions, is in the vertical column. These actions were determined by the planning group to be the most commonly needed to implement the plans started in the TCL planning document. The actions have been categorized into three broad strategy units. These are modification of behavior, of use and of the site. The second major heading is decision criteria located horizontally at the top of the matrix. These are determined by managers and are based upon factors which are thought to most likely influence the decision making process. Decision criteria may vary among managers and are best derived by mutual agreement with other pertinent staff.

Management actions are compared against a decision criteria moving down each column and a ranking scale number is inserted into the upper half of the appropriate cell. This step proceeds downward as opposed to across a row so that a better comparison can be made between actions. Individual columns are then successively filled in across the matrix. If a management action is judged not to be applicable to the impact or objective being assessed, then a zero is placed in the cell. For instance, the action of installing fire rings would not resolve the problem of human waste. Therefore, a zero would be placed in the cell of the first column and the technique would not be considered when assessing other criteria. This method will eliminate some of the apparent complexity and time consuming nature of the matrix, since certain actions will not apply to the unacceptable condition or objective being assessed. After the upper half of each cell has been filled in across the matrix, then each value is multiplied by the specific weighting factor and the resulting total is inserted into the lower half of the cell. Weighted and unweighted values are then totalled horizontally for each management action and the totals are placed in the appropriate columns. Comparisons are then made between the relative merits of the most preferred (highest scoring) management techniques and actions.

4. Once evaluations are completed, a preferred management action can be selected either singly or in combination with other preferred actions and developed into an action plan to help meet area objectives or resolve an unacceptable impact.

5. An action plan consisting of estimated cost, facilities needed, contrast or in-house, set construction date, etc., is established.

6. Implement the action plan. Monitor the work to insure that it meets objectives and standards.

Form 4. Management Strategy Process

Date _____

Area _____

Mgmt Obj. ROC _____

Dev. Scale _____ Impact ID _____

Management Strategies	Management Actions	Cost Effectiveness (matls. & supplies)	Applicable w/Personnel	Timely Implementation	Implement at Park Level	Consistent with Mgmt. Objectives	Probability of Reducing Occurrence	Maximize Recreation Opportunities	Public Acceptability	Non-Restrictiveness	Other	Unweighted Total	Weighted Total
	Decision Criteria												
	Weighting Factor	2	3	2	2	3	2	1	2	1			
Modify Behavior	Limit Camping Unit Numbers												
	Increased Enforcement												
	Limit Length of Stay												
	Contact Users												
	Provide Recreation Host at Site												
Modify Site	Obliterate Site												
	Restoration												
	Improve Access												
	Close Boat Access												
	Install Vehicle Barriers												
	Provide Toilets												
	Construct Boat Ramp												
	Provide Legal Access												
	Acquire Additional Land												
	Redesign Site												
	Thin Trees												
	Plant Trees												
	Remove Substandard Facilities												
	Install Facilities												
	Provide Stock Facilities												
	Provide Handicapped Accessibility												
	Survey Boundary Lines												
	Close Roads												
	Expand Site												
Modify Use	Seasonal Closure												
	Use Permits												
	Prohibit Expansion												
	Tent Use Only												
	Eliminate Stock												
	Eliminate Cattle												
	Limit Group Size												
	Swimming Beach Water Samples												

ACTIONS/DECISION CRITERIA (Ranking Scale)
1 - Least Applicable to 3 - Most Applicable
N/A - Not Applicable

WEIGHTING SCALE FOR DECISION CRITERIA
1 - Lease Important to 3 - Most Important

List and Definitions of Decision Criteria

Decision Criteria - Standards, tests, rules and guidelines by which the decision process is conducted and upon which judgements and solutions are based.

Cost of Materials and Supplies - Seeks to identify the least expensive technique in regards to estimated dollar value of the materials and supplies.

Applicable with Existing Personnel - Asks the question, are there currently enough people on the staff to do the job and do they have adequate time to implement the technique.

Timely Implementation - The degree to which a technique can be implemented within a reasonable timeframe, generally within the course of a season.

Can be Implemented at the Park Level - The degree to which the technique meets previously identified specific or general objectives of management.

Probability of Reducing Occurrence - (To be used for assessing impacts) The best guess estimate of the degree to which a technique either eliminates, reduces or prevents the reoccurrence of a particular problem.

Maximize Recreation Opportunities - The extent to which a technique provides for the most diverse utility in a given area.

Non-Restrictive - The extent of the controlling nature of a technique on a visitors freedom of movement or choice.

Table C: Potential Management Actions

Management Strategies	Management Actions
Modify Behavior	3. Limit camping unit numbers. 4. Increase enforcement. 7. Pack In/Pack Out. Users take rubbish and garbage with them. 9. Limit length of stay. 11. Contact users. 18. Provide recreation host at site.
Modify Site	1. Obliterate site. Remove all signs of use. May require seeding, barricading, closing. 6. Restoration. Rehabilitate impact area by seeding, relocating, barricading, etc. Remove dead trees, repair damaged area. 8. Improve access. Fill holes, improve drainage, grading, etc. 12. Close existing boat access. 13. Install vehicle barriers. 17. Provide toilets. New or replace. Pit, vault, chemical, water carriage. 19. Construct boat ramp. 20. Provide public legal access. 21. Acquire additional land. 22. Redesign site. 23. Thin trees. 24. Plant trees. 25. Remove facilities. Substandard facilities. 26. Install facilities. Firerings, tables, fences, signs, parking, etc. 28. Provide stock facilities. Hitching racks, posts, feed bins, etc. 29. Provide handicapped accessibility. 30. Survey boundary lines. 31. Close roads. 32. Expand site.
Modify Use	2. Seasonal closure. Wildlife management, Threatened and Endangered species, weather, etc. 5. Use permits. Commercial or other purposes. 10. Prohibit expansion. 14. Tent use only. 15. Eliminate stock. 16. Eliminate cattle. May require fencing or elimination of grazing permit. 27. Limit group size. 33. Swimming beach water samples. Coliform or fecal test to determine if site sue is polluting the lake.

APPENDIX G

Trail Maintenance Level Standards

Level 1

Goal	Clearing	Drainage	Tread	Switchbacks	Signing
Resource or protection	There will be no clearing for this level unless blatant resource damage is apparent.	Installation of water bars & ditches only. No corduroy, French drains or log crossings will be constructed.	No tread construction or maintenance; if delineation is necessary it will be done with rock cairns or blazes.	If outing of switchbacks occurs, the route causing the least erosion will be promoted. Other routes will be blocked with logs, rocks or brush.	Rock cairns or blazes will be used when trail is impossible to follow. Regulatory or directional signs at trail intersections only. No mileages given.

Level 2

Goal	Clearing	Drainage	Tread	Switchbacks	Signing
Resource protection User safety	Only brush and timber that horses and hikers cannot step over (max. 16" high) or pass underneath. Standing dead trees that constitute a hazard will be removed.	Installation of water bars and ditches only. Trails may be relocated around bogs. Corduroy may be constructed to protect the resource. Primitive bridges may be built at stream crossing which cannot be safely crossed.	Tread will be maintained and reconstructed (max. 2'), no new construction. Above delineation tactics can be employed where necessary. Loose rocks hindering travel will be removed.	All worn out switchback paths will be blocked or obliterated with natural materials.	Blazes and cairns will be used only when the trail is impossible to follow. Signing will be directional (no mileages) or regulatory where deemed necessary.

Level 3

Goal	Clearing	Drainage	Tread	Switchbacks	Signing
Resource protection User Safety User convenience	Clear 8' in height and 4' in width. All brush which causes visitors to step off the trail will be removed. Standing dead trees which may be a hazard, will be removed.	Water bars and ditches will be constructed and maintained. Trails will be relocated to avoid bogs or construct corduroy, log crossings of French drains. Culverts may be installed, or developed bridges built at stream crossings or ravines.	Tread will be constructed and maintained so that blazes and cairns are not needed. Tread width will be 36-48"; loose rocks which constitute a hazard will be removed.	Buck and pole, barrier logs, rocks, brush or other natural material will be used to block or obliterate all worn cut paths.	Signing will be regulatory, interpretive and directional where needed. Mileages will be given on directional signs.

ATTACHMENT C

THOMPSON CHAIN OF LAKES MANAGEMENT PLAN AND ENVIRONMENTAL ASSESSMENT

APPENDIX G, EXHIBIT A

CHAIN OF LAKES

EXHIBIT "A"

FLATHEAD COUNTY:

Township 26 North, Range 25 West, P.M.M.

(Little McGregor Lake)

Section 4: Lot 3 (40.04 acres) and SE¼NW¼ (40.00 acres); containing a total of 80.04 acres, more or less as recorded in the GLO plat records.

(McGregor Lake - North Point)

Section 5: Lot 1 (40.01 acres), Lot 2 (39.99 acres), Lot 3 (39.97 acres), Lot 4 (39.96 acres), Lot 5 (34.50 acres), Lot 6 (39.05 acres), Lot 7 (29.35 acres) and Lot 8 (37.52 acres); EXCEPTING that portion of land as described in Certificate of Survey No. 9802, and being a portion of Lots 7 & 8, containing 23.60 acres as filed with the Flathead County Clerk and Recorders Office. Said lands contain a total of 276.75 acres, more or less, as recorded in the GLO records and Certificate of Survey No. 9802.

(No Lake - North of McGregor Lake)

Section 6: Lot 2 (39.92 acres) and Lot 3 (39.91 acres); containing a total of 79.83 acres, more or less as recorded in the GLO records.

(McGregor Lake - East End)

Section 9: Lot 1 (29.47 acres), Lot 2 (17.86 acres), Lot 3 (46.63 acres), Lot 4 (16.53 acres), N½NE¼ (80.00 acres) and SE¼NE¼ (40.00 acres); ~~INCLUDING~~ that portion of land located in Lots 1, 2, 3 & 4 as described in Certificate of Survey No. 9378, containing 80.06 acres, as filed with the Flathead County Clerk and Recorder's Office. Said lands contain a total of 250.49 ~~250.49~~ acres more or less as recorded in the GLO records and Certificate of Survey No. 9378.

Township 26 North, Range 26 West, P.M.M.

(McGregor Lake - West End)

Section 1: Lot 1 (39.99 acres), Lot 2 (39.97 acres), Lot 3 (39.95 acres), Lot 4 (39.93 acres), Lot 5 (48.29 acres), Lot 6 (14.24 acres), Lot 7 (31.66 acres), Lot 8 (38.77 acres), Lot 9 (2.22 acres) [north of U.S. Highway 2, Book 560, page 74], S½NW¼ (80.00 acres) and SW¼NE¼ (40.00 acres). Said lands contain a total of 415.02 acres more or less as recorded in the GLO records and in Deeds Book 560, page 74.

SANDERS COUNTY:

Township 26 North, Range 27 West, P.M.M.

(Lower Thompson Lake & Thompson River)

Section 13: Lot 1 (40.04 acres), Lot 2 (20.43 acres), Lot 3 (47.19 acres), SW¼NW¼ (40.00 acres), NE¼NE¼ (40.03 acres) and SW¼NE¼ (40.09 acres) as shown on Certificate of Survey No. 1020 as filed with the Sanders County Clerk and Recorder's Office and as shown in the GLO records. Said lands contain a total of 227.78 acres more or less.

LINCOLN COUNTY:

Township 26 North, Range 27 West, P.M.M.

(Middle Thompson Lake - Logan SRS)

Section 3: Lot 5 (33.64 acres), Lot 6 (5.17 acres) and Lot 7 (35.47 acres) as shown in the GLO records and on Certificate of Survey No. 1756 as filed with the Lincoln County Clerk and Recorder's Office; EXCEPTING that portion of land as described in Certificate of Survey No. 1414, containing 1.42 acres and also excepting that portion of land described in Document Exhibit No. 1365 which lies partly in Section 3, containing 14.21 acres (calculated) as filed with the Lincoln County Clerk and Recorder's Office. Said lands contain a total of 58.65 acres, more or less.

(Middle Thompson Lake)

Section 4: Lot 1 (39.83 acres), Lot 2 (39.80 acres), Lot 3 (40.34 acres), Lot 4 (26.64 acres), Lot 6 (24.44 acres) and Lot 7 (44.86 acres) as recorded in the GLO records; EXCEPTING that portion of land as described in Certificate of Survey No. 1155, containing 4.03 acres and also excepting that portion of land as described in Book 78, page 310, containing 7.65 acres, as filed with the Lincoln County Clerk and Recorder's Office. Said lands contain a total of 204.23 acres, more or less.

(Upper Thompson Lake)

Section 5: Lot 1 (12.78 acres), Lot 2 (29.83 acres), Lot 3 (39.02 acres), Lot 5 (42.02 acres) and SW¼NE¼ (40.07 acres) as shown on the Certificate of Survey 1757 as filed with the Lincoln County Clerk and Recorder's Office. Said lands contain a total of 163.72 acres, more or less.

(Middle Thompson Lake - Westside near Bowers Peak)

Section 9: Lot 1 (27.57 acres), Lot 2 (48.12 acres) and SW¼NE¼ (41.02 acres) as shown on Certificate of Survey No. 1758 as filed with the Lincoln County Clerk and Recorder's Office. Said lands contain a total of 116.71 acres, more or less.

(Lower Thompson Lake - FAA)

Section 11: Lot 1 (16.17 acres) Lot 2 (48.13 acres), Lot 3 (19.7 acres), Lot 4 (20.27 acres), Lot 5 (25.83 acres), Lot 6 (35.28 acres), Lot 7 (17.73 acres), Lot 8 (2.43 acres), NE¼ (160.00 acres), N½NW¼ (80.00 acres) and SW¼SW¼ (40.00 acres); EXCEPTING that portion of land as described in Certificate of Survey No. 1670 containing 35.49 acres, as filed with the Lincoln County Clerk and Recorder's Office. Said lands contain a total of 430.05 acres, more or less.

Township 27 North, Range 27 West, P.M.M.

(Crystal Lake - Eastside)

Section 19: A portion of the SW¼ as shown on Certificate of Survey No. 1759; containing 75.42 acres, more or less, as filed with the Lincoln County Clerk and Recorder.

(No Name Lake - North of Upper Thompson Lake)

Section 29: SW¼; containing 162.07 acres, more or less, as shown on Certificate of Survey No. 1764 and filed with the Lincoln County Clerk and Recorder's Office.

(Upper Thompson Lake)

Section 31: Lot 1 (14.93), Lot 2 (41.85 acres), Lot 3 (26.64 acres), Lot 4 (36.41 acres), Lot 6 (34.51 acres) and NE¼SE¼ (40.60 acres) as shown on Certificate of Survey No. 1765; containing a total of 194.94 acres, more or less, and filed with the Lincoln County Clerk and Recorder.

(Upper & Middle Thompson Lake)

Section 33: SW¼SW¼; containing 40.31 acres, more or less and as shown on Certificate of Survey No. 1766, as filed with the Lincoln County Clerk and Recorder.

Township 27 North, Range 28 West, P.M.M.

(Loon & Little Loon Lakes)

Section 22: Lot 4 (18.48 acres), Lot 5 (21.01 acres), Lot 6 (27.94 acres), Lot 7 (39.57 acres), Lot 8 (5.68 acres), Lot 9 (1.38 acres), Lot 10 (51.41 acres), W½NW¼ (80.00 acres) and S½SE¼ (80.00 acres). Said lands contain a total of 325.47 acres, more or less, as recorded in the GLO records.

(Horseshoe, Leon & etc. Lakes)

Section 23: All; containing 473.21 acres, more or less, as recorded in the GLO records.

(Horseshoe, Lilypad & etc. Lakes)

Section 24: Lot 3 (40.12 acres), Lot 4 (25.36 acres) and S½NW¼NW¼ (19.91 acres) as shown on Certificate of Survey No. 1760, as filed with the Lincoln County Clerk and Recorder; containing a total of 85.39 acres, more or less.

(Crystal Lake - Westside)

Section 25: Lot 1 (31.85 acres), Lot 2 (43.81 acres), Lot 3 (47.23 acres) and NW¼SE¼ (40.00 acres) as shown in the GLO records and as shown on Certificate of Survey No. 1761, as filed with the Lincoln County Clerk and Recorder's Office; containing a total of 162.89 acres, more or less.

(Horseshoe & Leon Lake)

Section 26: NW¼NW¼ as shown on Certificate of Survey No. 1762, as filed with the Lincoln County Clerk and Recorder; containing 39.24 acres, more or less.

(Loon & Little Loon Lake)

Section 27: Lot 1 (35.48 acres), NE¼NW¼ (40.00 acres) and N½NE¼ (80.20 acres) as shown on Certificate of Survey No. 1763, filed with the Lincoln County Clerk and Recorder's Office, and the GLO records; containing a total of 155.68 acres, more or less.

All of the afore listed properties are subject to all purported reservations, exceptions, rights, terms and conditions, if any remain, as set forth in a recorded conveyance dated June 26, 1972, from the Anaconda Company to Champion International Corporation, recorded June 26, 1972, in Volume 88, page 509, records of Sanders County, Montana; in Book 18, page 34, records of Lincoln County; and, in Volume 538, page 582, records of Flathead County.

The above listed properties are also subject to those certain reservations for easements and rights of way for roads over, upon and across the Property as set forth in those certain deeds dated June 6, 1990 from Champion International Corporation to The Conservation Fund which were recorded June 6, 1990, in Flathead County under Reception No. 9015714440 in Sanders County under Volume 112, page 690, and in Lincoln County under Book 156, page 780.

And further subject to all reservations and restrictions contained in United States patents and all easements and rights-of-way of record or actually located on the ground.

CHAIN OF LAKES

EXHIBIT "B"- Access Rights of Way

SANDERS COUNTY:

Township 26 North, Range 27 West, P.M.M.

(To Lower Thompson Lake & Thompson River)
Section 13: NE¼SW¼ and S½SE¼

LINCOLN COUNTY:

Township 27 North, Range 27 West, P.M.M.

(To Upper Thompson Lake)
Section 31: S½NW¼ and SW¼NE¼

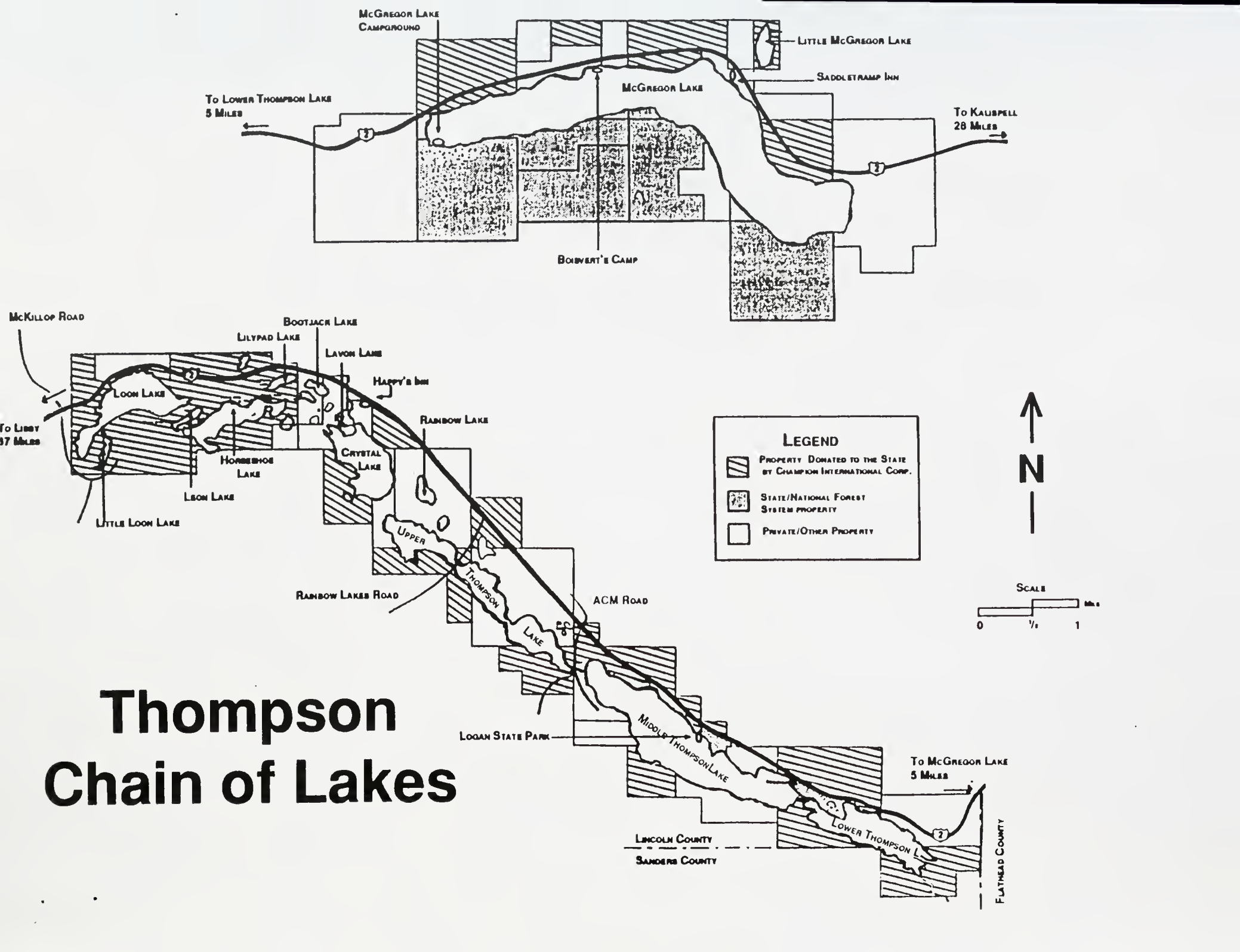
Township 27 North, Range 28 West, P.M.M.

(To Crystal Lake - Westside)
Section 25: SE¼SE¼

ATTACHMENT D

MAP, THOMPSON CHAIN OF LAKES

Thompson Chain of Lakes



ATTACHMENT E

CAPITAL AND OPERATIONS COST ESTIMATES
THOMPSON CHAIN OF LAKES

MARCH 24, 1995

OPERATIONS COST ESTIMATES
THOMPSON CHAIN OF LAKES

MARCH 25, 1995

PERSONNEL:

FTE	GRADE	SALARY & BENEFITS	FTE	SALARY & BENEFITS
Management:				
			Increase	Increase
.06	Grade 16	$3,387	-	-
.18	Grade 14	$6,292	-	-
Maintenance:				
.06	Grade 13	$1,997	.03	$ 998
.02	Grade 10	$1,080	.02	$ 540
.12	Grade 7	$2,726	.05	$1,135
Park Ranger:				
.25	Grade 11	$7,534	.15	$4,520
Park Attendant:				
.34	Grade 7	$5,995	.34	$5,995
1.03		$29,011		
ADDITIONAL FTE COSTS:[1]			**.59**	**$13,188**

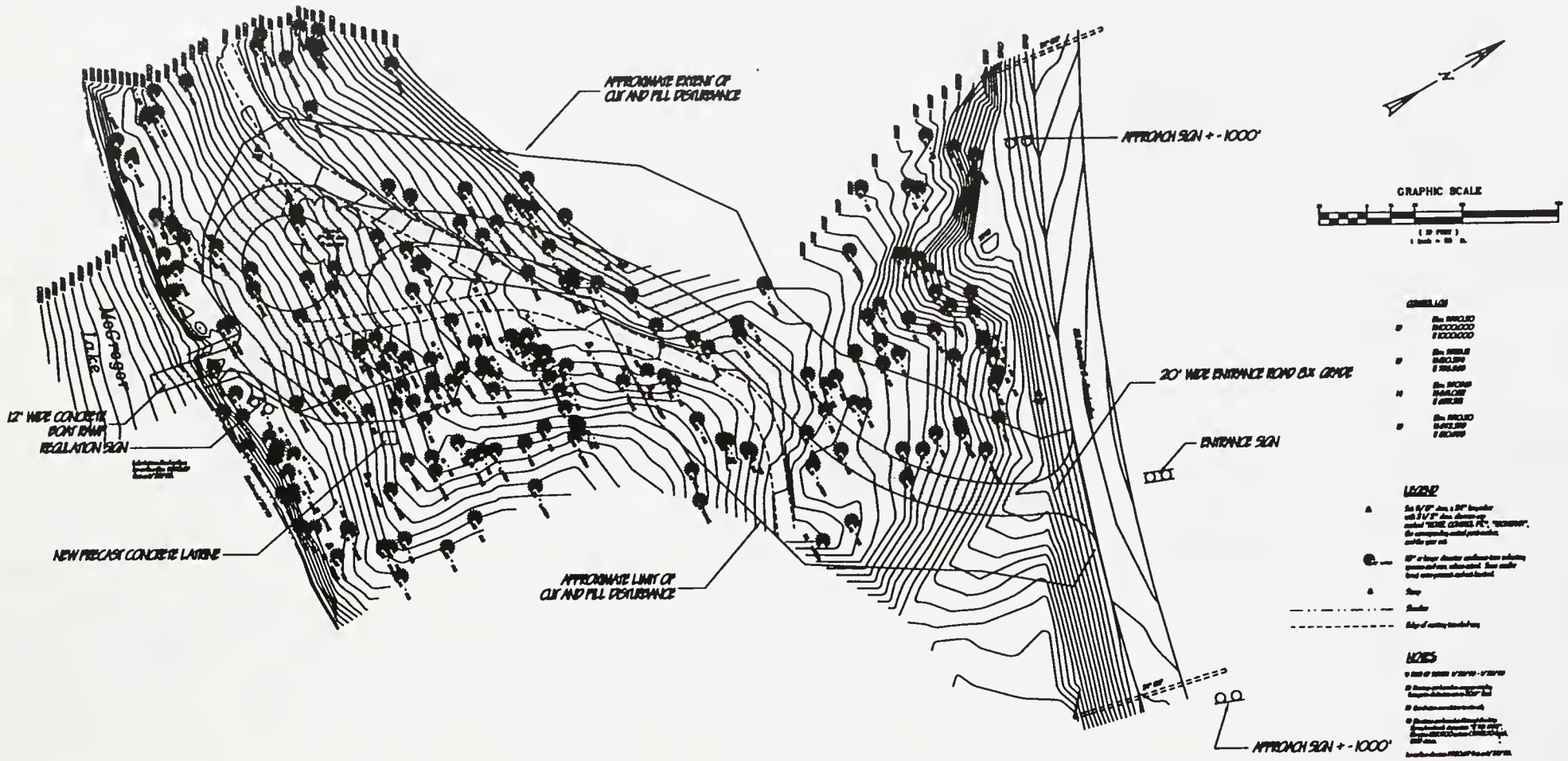
[1]. FTE could be reduced by use of an Adopt-A-Site program by .44 FTE and $8,668, reducing necessary FTE to .15, and necessary funding for FTE's to 4,520.

OPERATIONS:

CODE	CATEGORY		AMOUNT
2100	Other Services		
	Waste Disposal		
	13 vaults x $250	$3,250	
	Water Testing		
	5 sites x $54	$ 270	
	General	$ 620	
			$ 3,600
2200	Supplies and Materials		$12,000
2300	Communications		$ 600
2400	Travel		$16,200
2500	Rent		-
2600	Utilities		$ 500
2700	Repair and Maintenance		$ 3,600
2800	Other		$ 2,400
TOTAL OPERATIONS COSTS[2]			**$38,900**
FTE COSTS FROM PREVIOUS PAGE			**$13,188**
TOTAL			**$52,088**

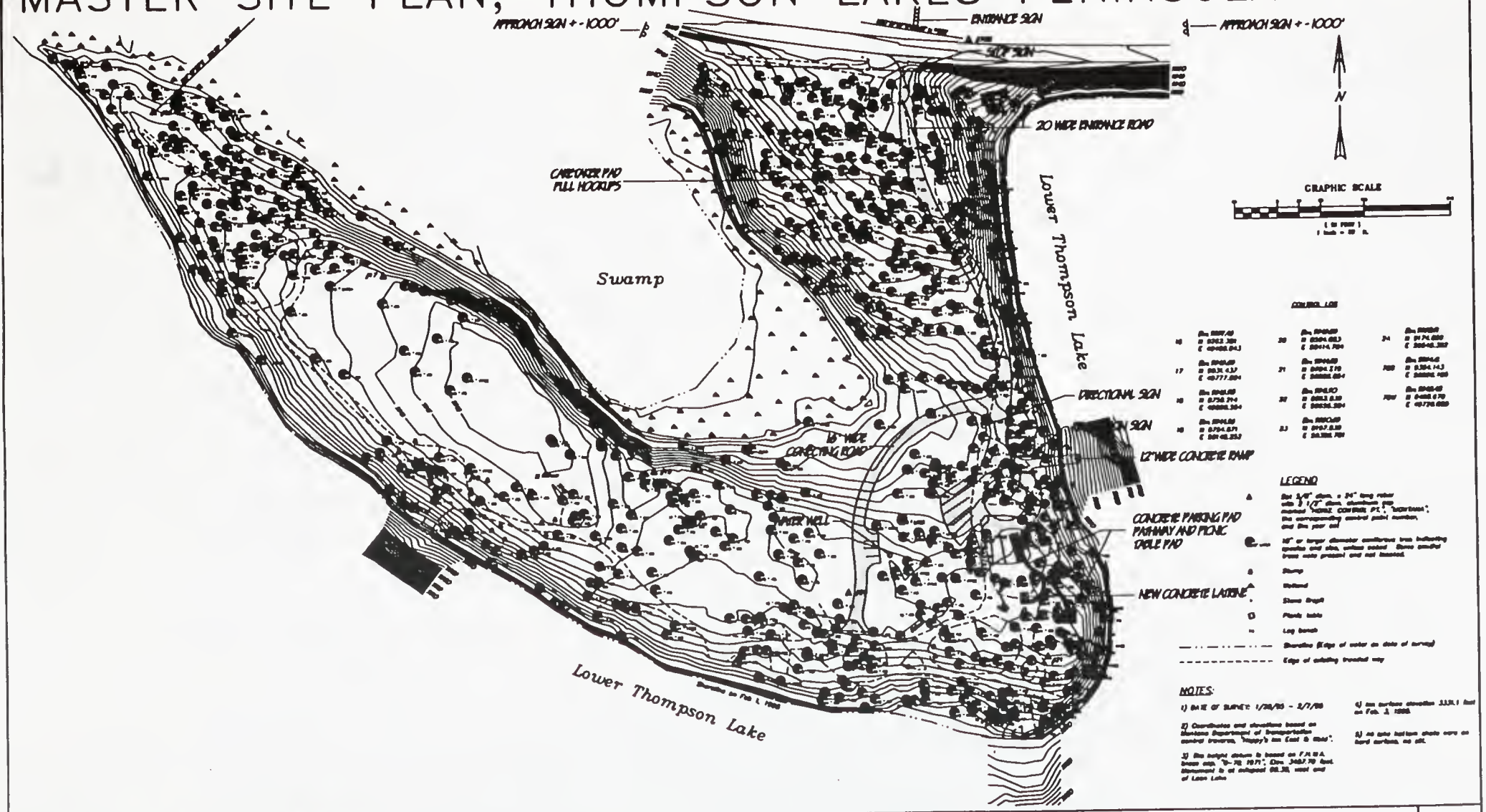
[2]. Operations could be reduced by use of an Adopt-a-Site program. Reduction would be approximately $14,900, leaving necessary operations at $24,000.

MASTER SITE PLAN
McGREGOR LAKE F.A.S.



Surveying and mapping provided by SMITH SURVEYING 1131 South Main P.O. Box 7323 Kalispell, MT 59903 (406) 257-4323	DRAWN BY: DATE:	REVISED BY: DATE:	APPROVED BY: DATE:	McGREGOR LAKE FISHING ACCESS SITE FWP 7942000 M.S.P.
	CHECKED BY: DATE:	APPROVED BY: DATE:	APPROVED BY: DATE:	SHEET 1 of 1

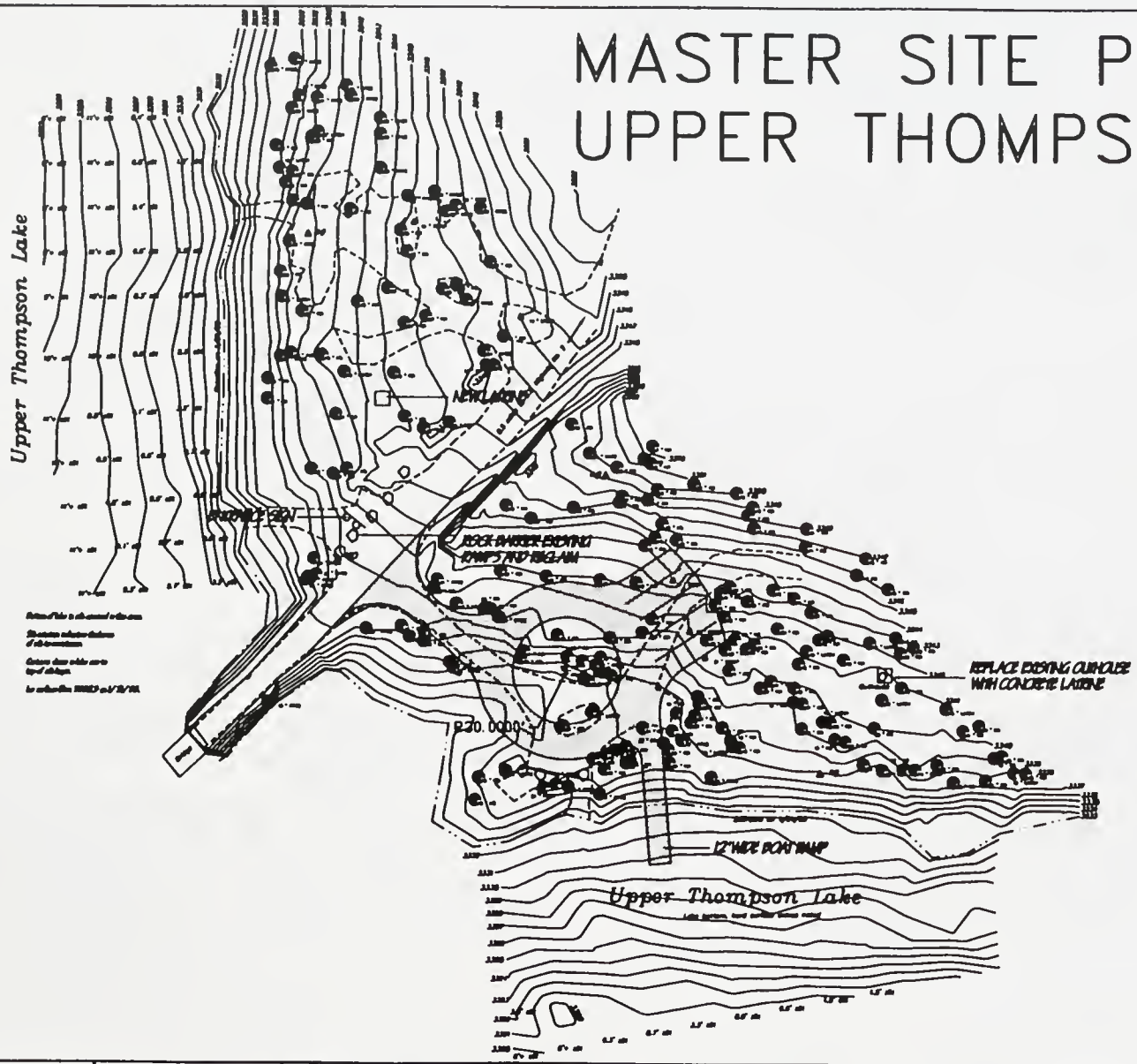
MASTER SITE PLAN, THOMPSON LAKES PENINSULA F.A.S.

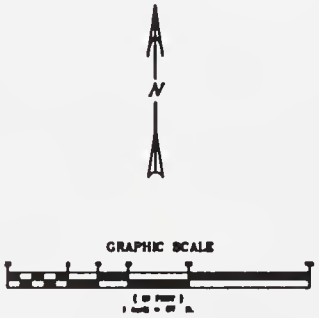


Surveying and mapping provided by SMITH SURVEYING 1131 South Main P.O. Box 7323 Kalispell, MT 59903 (406) 257-4323	DRAWN BY: J. VELLE DATE: 9/99	REVISED BY: DATE:	APPROVED BY: DATE:	THOMPSON LAKES PENINSULA FISHING ACCESS SITE
	CHECKED BY: DATE:	APPROVED BY: DATE:	APPROVED BY: DATE:	FWP 7942000 M.S.P.

SHEET 1 of 1

MASTER SITE PLAN
UPPER THOMPSON LAKE F.A.S.





LEGEND

COORD. LOG

NOTES

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SMITH SURVEYING
1131 South Main
P.O. Box 7523
Kalispell, MT 59903
(406) 257-4323

F. WILL 8/99			
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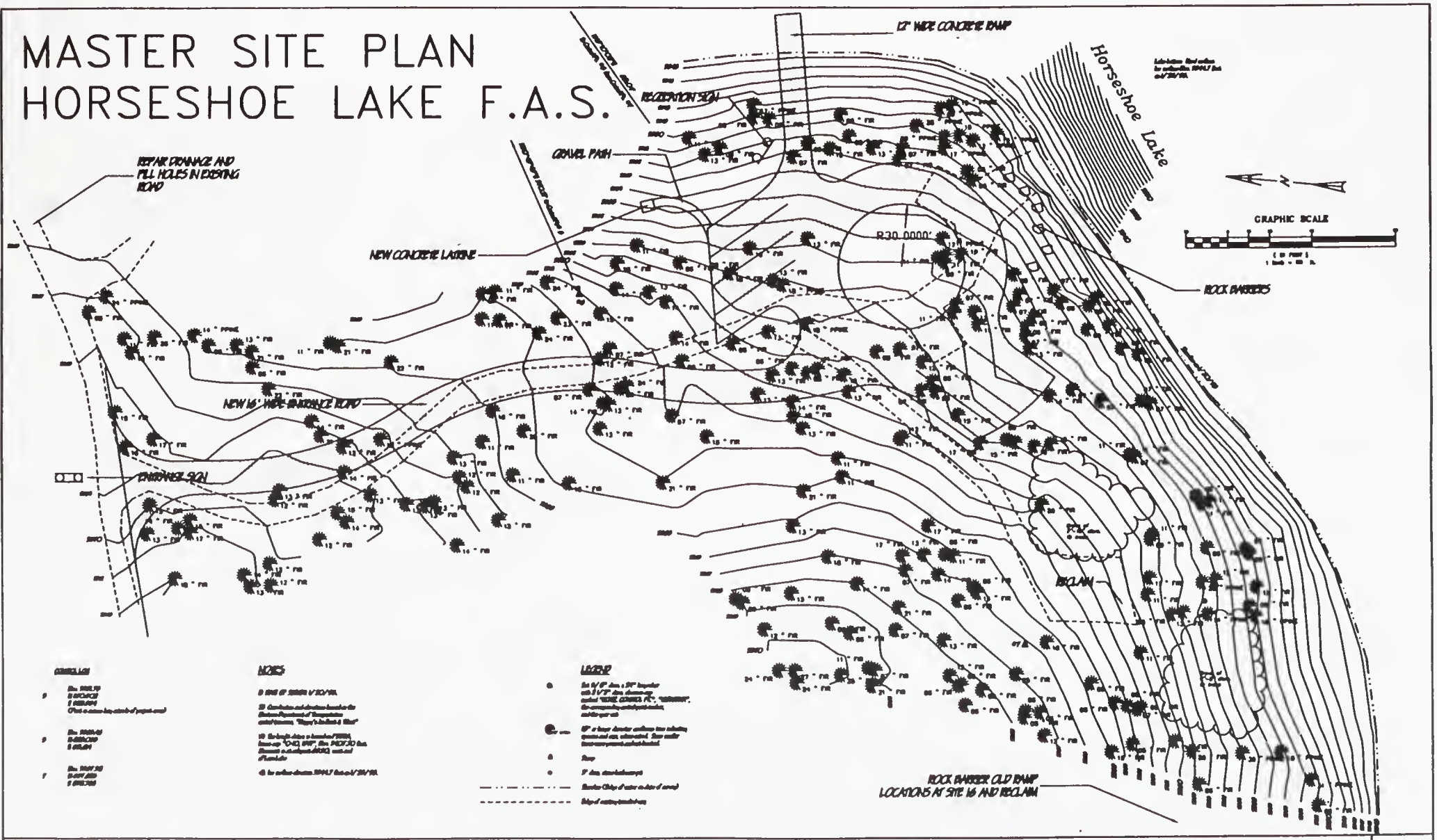
SHEET 1 of 1

MASTER SITE PLAN
HORSESHOE LAKE F.A.S.



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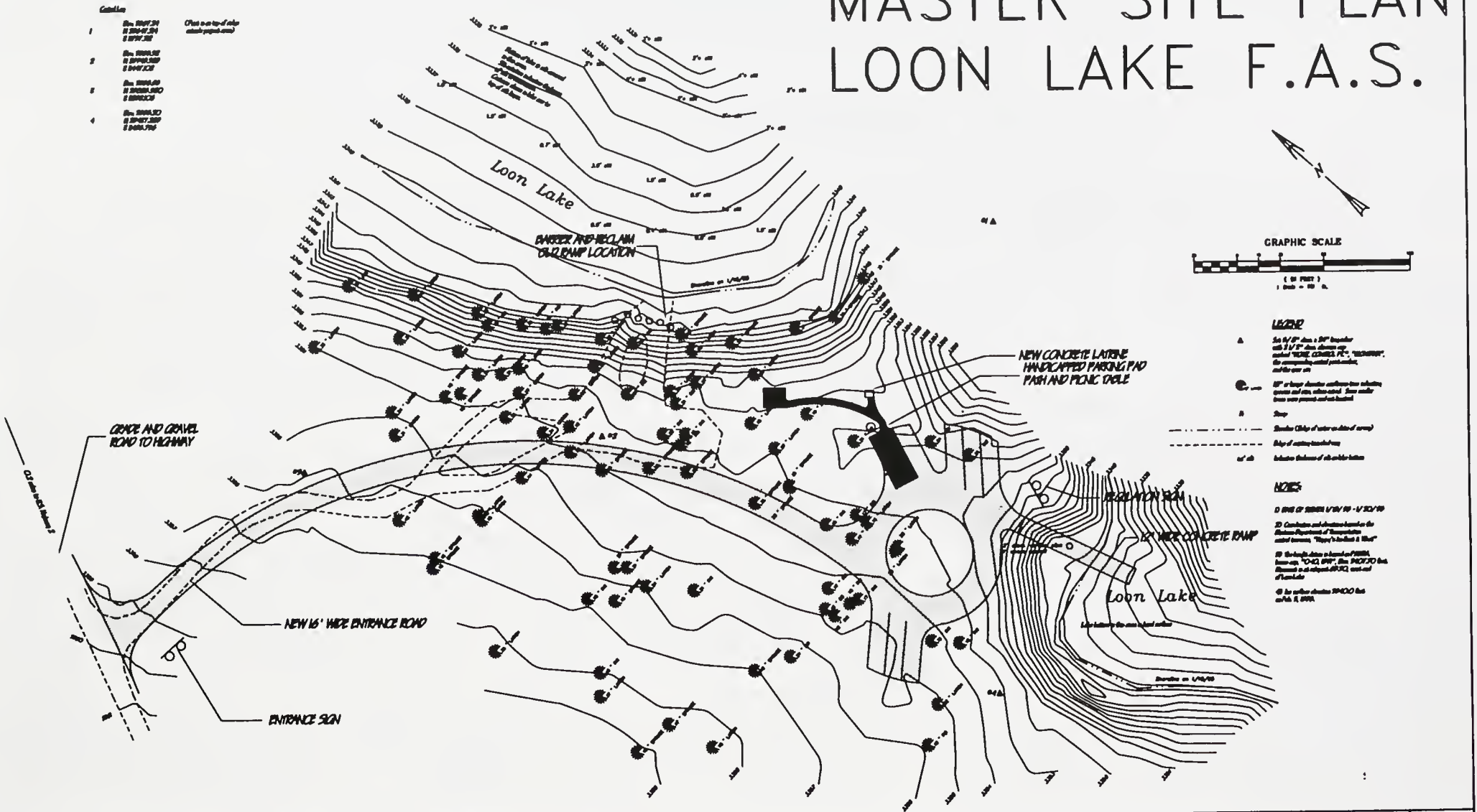
MASTER SITE PLAN
LOON LAKE F.A.S.



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1131 South Main
P.O. Box 7323
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(406) 257-4323

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SHEET 1 of 1

ATTACHMENT F

SELECTED PORTIONS
REGION ONE WEED MANAGEMENT PLAN
AND ENVIRONMENTAL ASSESSMENT

APRIL 1, 1995

1.0 INTRODUCTION

1.1 Program Guidance and Objectives

Montana Fish, Wildlife & Parks (FWP) recently adopted its Vision document which describes the direction in which FWP is heading and how the goals articulated within that document will be reached (FWP 1992). The basic Mission of the agency is:

> "to provide for the stewardship of the fish, wildlife, parks, and recreational resources of Montana, while contributing to the quality of life for present and future generations."

A key element of all Montana Fish, Wildlife & Parks programs is to consider how policies and programs affect adjacent lands, and in turn, how adjacent lands affect FWP properties. This perspective is rooted in a strong commitment to public involvement in management decisions. In 1983, FWP adopted a Noxious Weed Control Program for lands managed by the agency (FWP 1983). The objective of the program is:

> "to prevent, to the greatest extent possible, the reproduction, proliferation, and distribution of agriculturally undesirable plant species throughout department lands or from department lands onto adjacent lands."

Overall direction for regional implementation of the Noxious Weed Management Program is provided by the Vision document and statutory requirements based in state law and local ordinances. The purpose of FWP Region One's Noxious Weed and Exotic Vegetation Management Plan is to describe the strategies and management actions necessary for the prevention, stabilization, control, or eradication of noxious weed and some categories of exotic plant species on FWP lands.

Management actions must be appropriate to land classification and use, and must satisfy FWP's legal mandate to serve as steward of specific natural and recreational lands within northwestern Montana. This Plan outlines an integrated approach to weed management based on site conditions by employing a variety of treatment methods and techniques including manual,m cultural, biological, and chemical. More specifically, the objectives of the Plan are to:

- Meet legal requirements (including the County Noxious Weed Control Act and the Montana Environmental Policy Act) to manage plants declared as noxious weeds by the State and by the Flathead, Lake, Lincoln, and Sanders county weed boards.

- Develop and implement an integrated approach to noxious weed management and a strategy to prioritize treatment areas.

- Attempt to contain, reduce or eradicate weed populations, depending on the location and status of the population.

- Prevent the introduction and establishment of new noxious weed species, and exotic plant species in Natural Zones of State Parks, to the extent feasible.

- Work cooperatively with adjacent landowners and the County Weed Boards to enable consistent and sound weed management efforts.

- Conduct treatments in an ecologically responsible manner to maintain fish, wildlife, and vegetation resources and protect human health and safety.

- Involve the public in the planning process.

1.2 Existing Statutory Requirements

The State of Montana has recognized the damaging effects of noxious weeds in laws and regulations. The County Noxious Weed Control Act of 1979 (MCA 7-22-21-1 *et seq.*, as amended 1991, Appendix A) defines "noxious weeds" as "any exotic plant species established or that may be introduced in the state which may render land unfit for agriculture, forestry, livestock, wildlife, or other beneficial uses or that may harm native plant communities..." Administered at the county level, this law requires counties to develop weed control districts to plan and implement a weed control program. County commissioners appoint a district weed board which is responsible for the administration and enforcement of the district's noxious weed control efforts. The law provides for the promulgation of rules to list statewide noxious weeds and, it allows for county-wide listing of additional species. In addition, this law also gives specific direction to counties for cooperation with state and federal-aid programs. Furthermore, the law states that "it is unlawful for any person to permit any noxious weed to propagate or go to seed on his [or her] land" (7-22-2115) and, it encourages landowners to file weed control plans (7-22-2116).

The weed species declared as noxious by the State of Montana (through the Department of Agriculture) and by the individual county weed boards within the administrative boundaries of FWP Region One are listed in Appendix B. The treatment of noxious weeds, particularly through the use of herbicides, is also subject to other state and federal laws as well as the policies and programs of other agencies. These are summarized in Appendix C.

1.3 Overview and Setting

Exotic (non-native) "weedy" plants have been noted in Montana throughout this century. A number of these species are increasing in quantity, area and density. This presents a problem for the perpetuation of native plant communities and ecological processes on FWP properties. It also impacts the quality of recreation and increases the potential for spread to lands adjacent to FWP properties.

"Native" plant species occur and evolve naturally without human intervention or manipulation. Species that move into an area without the aid of humans are considered native. A goal of FWP is to perpetuate native plants and animals as part of natural ecosystems.

"Exotic" plant species are those that occur in a given place as a result of direct or indirect, deliberate or accidental actions by humans (not including deliberate reintroduction). The exotic species introduced because of such human action have not evolved with species native to the place in question, and therefore are not a natural component of the ecological system characteristic of that place.

A "weed" is any plant that is out of place, is undesirable and is growing where it is not wanted. "Noxious weeds" are plants in the wrong place that are harmful or destructive to man or other organisms (Holmes, 1979; Webster, 1981). Noxious weeds are prohibited or restricted by Montana law. Transporting seed or parts of these plants, or allowing them to seed on one's property is prohibited.

A "pest" is a population of plants or animals that interfere with the purpose of a state park.

FWP draws a distinction between "weedy" species and "noxious" species. FWP recognizes the value of some weed species in Wildlife Management Areas as food and/or cover. For example, some "weedy" species in the composite family (e.g. dandelion, prickly lettuce, and goat's beard) are important components of upland game bird summer diets. As declared in law, "noxious" weeds are those non-native species which are very aggressive and successful competitors for nutrients, moisture, and space. In the past few decades, some noxious weed species have become significant components of local vegetation communities, actually dominating some sites. Noxious weeds may reduce vegetation biodiversity and may limit the diversity of wildlife. Native vegetation species are also more desirable for providing erosion control and visual aesthetics.

Noxious weeds occur on many sites currently administered by FWP, although most invasions occurred prior to FWP acquisition. The number of species and the total coverage vary considerably by site and the nature of land use. Important factors influencing noxious weed establishment include proximity to water, previous overgrazing practices, human activities, site disturbance and seed dispersal -- the latter two of which can be aggravated by road access.

This Plan considers the treatment and management of noxious weeds on 74 separate properties totalling 18,178 acres owned by or leased to FWP Region One within Flathead, Lake, Lincoln and Sanders counties (FWP 1994). Figure 1 illustrates the location of these properties. Several land parcels owned by FWP are leased to other individuals or municipalities. This Plan will note the location of such properties but not address noxious weed management as individual leases may specifically address the topic. Chapter 2.0 identifies strategies to prioritize treatment activities and reviews methods and techniques of noxious weed treatments. Chapter 3.0 outlines specific weed management programs for the groups of properties outlined below.

1.3.1 Property Groups

Lands administered by FWP are classified according to the Department Land Classification Manual (FWP 1988) based on management, uses and funding sources. The Wildlife Division manages Wildlife Management Areas (WMA's) and Wildlife Habitat Protection Areas (WHPA's). These areas are set aside primarily to preserve wildlife habitat and secondarily to provide opportunities for both consumptive and non-consumptive outdoor recreation. There are 8 WMA's and 6 WHPA's totalling 9,774 acres in Region One.

The Fisheries Division oversees the management of Fishing Access Areas, Sites, Greenways, Hatcheries and Administrative Sites. Maintenance activities on Fishing Access Areas and Sites (FAS) is the responsibility of the Parks Division. Fishing Accesses provide the public with opportunities to access river corridors and lakes to fish, boat, hunt, picnic, watch wildlife, camp, etc. There are 33 Fishing Accesses and 9 affiliated lands totalling 5,411 acres in Region One.

The Parks Division manages State Parks classified as either: natural, historic, or recreation. State Parks are established for the purpose of conserving the scenic, historic, archaeologic, scientific, and recreational resources of the state and providing for their use and enjoyment, thereby contributing to the cultural, recreational, and economic life of the people and their health (23-1-101 MCA). The Parks division also oversees the maintenance of all FAS's and the Region One Headquarters complex. There are 6 State Parks (SP's) and 2 affiliated lands totalling 2,993 acres in Region One.

One administrative site for the Region One Headquarters complex, totalling 3.27 acres, is owned by FWP. The Parks Division oversees the maintenance of this administrative site.

Because of differences in land use, site disturbance, and the degree of noxious weed establishment, these lands have different opportunities and constraints for the management of noxious weeds. Therefore, this Management Plan will examine groups of properties where similarities merit and will direct appropriate management strategies accordingly. Site specific management strategies will be outlined for property groups, while recognizing that some deviations will occur. These differences will be highlighted and addressed more specifically in Part 3.0 of this document. The following discussion describes the groupings in general, whereas Tables 1, 2, and 3 outline the property groups, list discrete properties by name, and report the findings of the most recent noxious weed inventory conducted on each property during summer, 1993.

Figure 1. Properties owned by or leased to Montana Fish, Wildlife & Parks in Region One. Key to the Fishing Access Sites appears on the next page.

Key to the Fishing Access Sites

CLARK FORK RIVER DRAINAGE

8. Flatiron Ridge
30. Thompson Chain of Lakes

FLATHEAD RIVER DRAINAGE

1. Ashley Creek
2. Ashley Lake
3. Beaver Lake
4. Bigfork
5. Blanchard Lake
6. Bootjack Lake
7. Ducharme
11. Horseshoe Lake/Ferndale
12. Kokanee Bend
13. Kuhns
15. Loon Lake/Ferndale
17. Marlowe Springs
19. Old Steel Bridge
20. Pressentine
21. Skyles Lake
22. Smith Lake
23. Somers
25. Sportsmans Bridge
26. Spring Creek
27. Swan River
28. Teakettle
31. Walstad
32. Whitefish River
33. Woods Bay

KOOTENAI RIVER DRAINAGE

9. Frank Lake
10. Glen Lake
14. Loon Lake/Eureka
16. Marl Lake
18. Moran Lake
24. Sophie Lake
29. Tetrault Lake

[1] SIZE: total acres, including roadsides and scattered patches away from roads

[2] DENSITY: number of weed stems in the population

VLD:	*very low density*	--	*one or a few individual plants, accounting for a very small proportion of the vegetative ground cover; native species well represented*
LDA:	*low density - A*	--	*individual plants clumped in small areas, accounting for a small proportion of the vegetative ground cover; native species well represented*
LDB:	*low density - B*	--	*individual plants scattered throughout site, accounting for a small proportion of the vegetative ground cover; native species well represented*
MD:	*moderate density*	--	*individual plants numerous, accounting for a moderate proportion of the vegetative ground cover; native species present*
HD:	*high density*	--	*individual plants abundant, accounting for a high proportion of the ground cover; native species present but not well represented*
VHD:	*very high density*	--	*individual plants very abundant, accounting for almost all of the vegetative ground cover; native species almost absent*

Table 2. Noxious weed species present and status on Department of Fish, Wildlife and Parks (FWP) Fishing Access Sites in Region One, by drainage.

FWP PROPERTY NAME and ACREAGE	WEED SPECIES PRESENT[1]	WEED STATUS SIZE[2]	DENSITY[3]
CLARK FORK RIVER			
Flatiron Ridge (24.9)	SK	20	MD
Thompson Chain of Lakes (3,965.07)	SK, CT, SJ	1500, 900, 10	MD, MD, VLD
FLATHEAD RIVER			
Ashley Creek (18.25)	unknown		
Ashley Lake (31.56)	unknown		
Beaver Lake (2)	SK	1/4	VLD
Bigfork (0.69)	NONE		
Blanchard Lake (9.31)	SK,CT	1,4	LDA,LDB
Bootjack Lake (0)	unknown		
Ducharme (51.25)	SK	1/4	LDA
Horseshoe Lake/Ferndale (22.92)	unknown		
Kokanee Bend (172.34)	SK, LS, CT	15, 3, 1	MD, LDA, VLD
Kuhns (82.59)	unknown		
Loon Lake/Ferndale (4.36)	unknown		
Marlowe Spgs (13.53)	unknown		
Old Steel Bridge/Kiwanis (122.3)	SK, CT	25, 2	MD, LDA
Pressentine (7.02)	SK, CT	4, 1/8	LDB, VLD
Skyles Lake (0.75)	SK	1/2	LBD
Smith Lake (3.16)	SK,CT	1/2, 1 1/2	LDA,LDB
Somers (2)	SK	1/64	LDA
Sportsmans Bridge (5.77)	SK	1/16	LDA
Spring Creek (240)	unknown		
Swan River (58.52)	SK	1/16	VLD
Teakettle (2.5)	SK	1/64	MD
Walstad (4.57)	CT	1/64	MD
Whitefish River (3.29)	NONE		
Woods Bay (11.7)	SK	1/2	VLD

FWP PROPERTY NAME and ACREAGE	WEED SPECIES PRESENT[1]	WEED STATUS SIZE[2]	DENSITY[3]
KOOTENAI RIVER			
Frank Lake (88.88)	unknown		
Glen Lake (1.4)	NONE		
Loon Lake/Eureka (0.56)	unknown		
Marl Lake (3.02)	unknown		
Moran Lake (0)	unknown		
Sophie Lake (17.82)	SK	6	LDB
Tetrault Lake (7.88)	SK	5	HD
FISH HATCHERIES and ADMINISTRATIVE SITES			
Flathead Lake Salmon Hatchery (25.47)	SK	1/2	VLD
Jocko River Trout Hatchery (59.71)	SK	6	LDA
Lake Mary Ronan Spawn Station (40.27)	unknown		
Lore Lake Spawn Station (0)	unknown		
Libby Field Station (67.57)	SK,CT	11	LDA
Lone Lake Hatchery (4.33)	unknown		
Region One Headquarters Complex (3.27)	NONE		
Rogers Lake Spawn Station (0.63)	unknown		
Rose Creek Hatchery Site (20.2)	CT	10	LDA

[1] Weed species abbreviations:

SK = spotted knapweed	LS = leafy spurge	ST = sow thistle
CT = Canada thistle	MT = musk thistle	BT = bull thistle
MU = mullein	DT = dalmatian toadflax	SJ = St. Johnswort
OW = other weed-like vegetation		

[2] SIZE: total acres or partial acres for each species, respectively:

1 acre = 43,560 ft^2 (200' x 200')	1/16 acre = 2,722 ft^2 (50' x 50')
1/2 acre = 21,780 ft^2	1/32 acre = 1,361 ft^2
1/4 acre = 10,890 ft^2 (100' x 100')	1/64 acre = 680 ft^2 (25' x 25')
1/8 acre = 5,445 ft^2	< 1/64 acre estimation in square feet

[3] DENSITY: number of weed stems in the population, respectively:

VLD: very low density -- *one or a few individual plants, accounting for a very small proportion of the vegetative ground cover; native species well represented*

LDA: low density - A -- *individual plants clumped in small areas, accounting for a small proportion of the vegetative ground cover; native species well represented*

LDB: low density - B -- *individual plants scattered throughout site, accounting for a small proportion of the vegetative ground cover; native species well represented*

MD: moderate density -- *individual plants numerous, accounting for a moderate proportion of the vegetative ground cover; native species present*

HD: high density -- *individual plants abundant, accounting for a high proportion of the ground cover; native species present but not well represented*

VHD: very high density -- *individual plants very abundant, accounting for almost all of the vegetative ground cover; native species almost absent*

High Human Use Zone

High human use zones are areas which have concentrated and frequent public or FWP employee use. Examples include picnic table areas, tent sites, restrooms, drinking water well sites, interpretive sites, and boat launch areas. Because of the high degree of ground disturbance and the intense activity level, these areas are very susceptible to the encroachment and rapid spread of noxious weeds. Once invaded, these areas require aggressive treatment actions. The weed management goal is to reduce noxious weed populations in areas which are continually or heavily used by people, while simultaneously ensuring public health and safety. In the majority of situations, a buffer zone of at least 50 feet is maintained from such zones during chemical application. Weed management guidelines for this zone follow:

- Emphasize prevention as the key component of management efforts, primarily by cooperating with educational programming initiated by other organizations to increase public awareness of noxious weeds.

- Encourage manual, cultural, or biological treatments; consider the plausibility of spot herbicide treatments on a site by site basis.

- Post signs in high human use zones prior to and for 24 hours after herbicide applications to notify the public that spraying activities will/have occurred.

- Wash and rinse residue from surfaces used by the public for food handling if herbicides are applied within 50 feet.

- Use only those chemicals with label designations specifying permission for use in human occupation areas (e.g. glyphosate, clopyralid, and 2,4-D).

2.3 Treatment Methods and Techniques

Within the framework of INWM, there are four general weed treatment methods, each with several specific techniques or agents. Manual, cultural, biological, and chemical methods for the treatment and management of noxious weeds are described below, with specific techniques or agents identified. Additional methods and techniques will be considered in the future as they become available.

2.3.1 Manual

Manual techniques involve grubbing with hand tools (shovel, hoe, pulaski etc...), topping (shears, clippers, and "weed-whackers"), and hand-pulling to treat noxious weeds. These techniques can effectively reduce small populations of annual or biennial noxious weed species, primarily by reducing seed production. Periodic re-treatment is required. Because these

techniques are labor intensive, their application would be mostly limited to environmentally or culturally sensitive areas.

2.3.2 Cultural

Cultural techniques include burning, mowing, tilling, reseeding, and grazing. These techniques effectively reduce some noxious weed species, although implementation is often limited by topography and access. These techniques can also be costly and time consuming. Furthermore, some techniques disturb the soil which can contribute to noxious weed proliferation if revegetation does not occur rapidly.

Burning

As a treatment technique, burning alone is generally of limited effectiveness. It may be considered in the future in conjunction with other treatment techniques such as reseeding.

Mowing and Tilling

Mowing and tilling can prevent noxious weed plants from producing seeds when treated in the bud stage or earlier. Repeated efforts during a single growing season can deplete the underground food supply of some perennial species. These treatments would need to be repeated over at least a five-year period to attain satisfactory results since they do not eliminate weed plants themselves. These methods may also weaken non-target species. Mowing and tilling opportunities are often limited because of steep slopes and rugged terrain. Mowing would be considered on level or nearly level slopes, where suitable soils exist and where a small percentage of the vegetation consists of shrubs. Mowing is also an alternative in environmentally sensitive areas where other treatment methods are unsuitable. Tilling would be considered only for areas that had previously been or are currently under cultivation because ground disturbance may increase the likelihood of noxious weed establishment beyond the potential benefits of tilling. However, tilling combined with a reseeding program would be considered when economically feasible. Other treatment methods would also be considered in conjunction with tilling such as alternate cropping systems, grazing systems, or chemical applications.

Reseeding

Reseeding is required where plant communities are completely disturbed by facility construction. It may also be advisable where vegetation communities are dominated entirely by noxious weeds. Such revegetation projects require considerable effort to eliminate existing weeds, prepare a seedbed, and re-plant. In radically disturbed areas, it is imperative to reseed as soon as possible. Topsoil should be salvaged and replaced on the disturbed site immediately to

encourage native species to sprout from seed, rhizomes, or other plant parts in the salvaged soil. Despite the significant expense, dramatic results can be achieved.

Grazing

Grazing by domestic sheep and goats have effectively controlled the spread of leafy spurge in certain situations in Flathead County and other parts of Montana, as well as in North Dakota. Other weed species were often selected early in the growing season since they tend to green up earlier than native plants. Controlled livestock grazing incorporating adequate vegetative rest is utilized on several of the WMA's to maintain and/or improve range condition thereby discouraging weed proliferation. Many leafy spurge populations on Region One properties occur where careful herding and/or installation of temporary fences would be necessary. When considering this treatment technique, the effect of grazing on soils, water, and riparian areas will be considered.

2.3.3 Biological

Biological control methods are those which introduce natural enemies (insect pathogens) to a noxious weed population. Biological control agents stress noxious weeds, severely reducing seed production and/or plant viability. Biological agents will not eliminate the species, but can reduce the population to a tolerable level, particularly when used in combination with other treatment techniques. Biological control methods may be the only treatment possible in areas where manual, cultural, or chemical methods are not feasible.

Biocontrol agents are currently being developed and screened by universities and the USDA Animal, Plant and Health Inspection Service (APHIS). There are also commercial sources for a number of agents. Several biological agents have been released in the counties of Region One. Release of biological control agents onto FWP properties will be in cooperation with the counties, the Montana Agricultural and Experiment Station at Montana State University, and APHIS. FWP personnel in Region One have been working with APHIS to establish insectaries on certain properties which meet selected criteria. Over the long term, biological control agents are cost effective because expenses are limited to the collection and release of new agents and periodic monitoring to insure spread and infection. However, it remains to be seen whether biocontrol agents can keep pace with the rate of spread of certain noxious weed species, whether on FWP properties or elsewhere.

With any biocontrol program, it is necessary to maintain a viable <u>host</u> population for the biological control organism. Areas selected for release of these agents will be screened with respect to location and plant community. As such, these areas preclude weed eradication objectives and the use of herbicides. Appendix D summarizes biological control agents currently available in Montana, and those which have been released on FWP properties in Region One.

2.3.4 Chemical

Chemical methods involve the use of herbicides to kill weeds directly or the application of soil sterilants which prevent the germination of noxious weed seeds. Over the past half-century, chemical herbicides have been developed to treat a variety of weed species. While the benefits of chemical techniques include efficacy and low cost, there are valid concerns about any application of chemicals to the landscape. In addition to concerns about the effects of chemical exposure on human health and the environment, attention has also focused on chemical storage, handling, use, and disposal procedures. Herbicide manufacturers have responded to these issues with attempts to develop products that are: (a) more pest specific to reduce effects on non-target species, (b) less toxic to humans, birds, fish and other animals, and (c) less likely to impact the environment, particularly water quality. The following discussion highlights these points in greater detail.

Efficacy and Cost

Properly used chemical herbicides are usually effective against their targets. Variation in effectiveness is attributable to environmental conditions, skill of the applicator, condition of the equipment, application rates, and the target species. For example, leafy spurge is difficult to eradicate with chemicals whereas spotted knapweed can be successfully eradicated, in the short-term. Herbicides are relatively inexpensive to obtain and apply.

Human Health Effects

A definitive evaluation of human health risks from exposure to herbicides is beyond the scope of this Plan. The long-term health effects of chemical herbicides continue to be researched. Short-term health effects can be serious for sensitive individuals. Health effects are most commonly reported among herbicide applicators. Due to uncertainty over health and environmental effects, FWP hopes to reduce the use of chemical herbicides over time.

Environmental Concerns

Environmental concerns over the storage, handling, use, and disposal of chemicals are based on four issues: persistence, potential for movement, contamination of surface and groundwater, and the potential for chemical spills.

Persistence refers to the longevity of a chemical's integrity. It is usually expressed as half-life or the length of time required for half of the substance to become inert. Herbicides are degraded by physical, chemical and biological processes. Many herbicides degrade to very low levels in soil after several weeks or months, whereas others persist for several months to years. Most herbicides are broken down and adsorbed in the uppermost 12 inches of the soil profile.

Potential for movement describes the transport of chemicals through the environment as solids, liquids, and gases. Once applied, herbicides are absorbed, adsorbed, accumulated, degraded, diluted, inactivated, and/or mobilized. Solubility in water gives a preliminary indication of chemical mobility. The ultimate fate is heavily influenced by the type of herbicide, the application rate, environmental conditions at the time of application, and site characteristics. Individual properties or characteristics of herbicides also affect persistence and potential for movement due to the interaction of active ingredients with soil organic matter and clay particles. Research has been conducted on most common herbicides to establish environmental pathways and final fate. Research findings are incorporated into herbicide label instructions distributed with chemicals at purchase. These instructions are an important component of herbicide use and safety and will be discussed later.

Contamination of surface and groundwater results from improper use and application of chemical herbicides. Sandy and gravelly soils, having high infiltration and hydraulic conductivity rates, may transport chemicals directly to surface or groundwater. Transport may also occur where fractured bedrock lies close to the surface. Drainage paths, whether natural or artificially created, could also transport chemicals. These mechanisms of transport involve relatively low chemical concentrations, though some level of contamination may still result if appropriate applications guidelines are not followed.

In contrast, the potential for high chemical concentration levels exists in the event of a spill, with the extent of contamination depending of the nature of the spill. Many spills occur during transport, resulting from auto accidents. However, spills may also occur during application or storage. For these reasons, this Plan also outlines emergency response procedures in the event of an accidental spill. The Herbicide Emergency Response Plan is in Appendix E.

Because of the aforementioned concerns, FWP intends to minimize the reliance on chemical methods as much as possible, while still meeting its legal responsibility to manage and treat noxious weeds on its properties. However, because the proliferation of noxious weeds does not appear to be decelerating, chemical methods remain a necessary component of this Plan. Therefore, it will be under the following guidelines that FWP applies chemical herbicides to its properties:

- Consider the treatment objective, season of application, stage of plant growth, topography, species present, expected cost, equipment limitations, and potential environmental impacts during site specific planning.

- Determine rates of application from label instructions, taking into account target species, other vegetation in the area including desirable vegetation species, soil type, human occupation, wildlife, and the presence of surface waters or shallow groundwater.

- Conduct and supervise all applications with an applicator licensed by the State of Montana, whether that individual is a Department employee or contractor.

- Use vehicle-mounted spray applicators (hand-gun, boom, injector etc...) in open areas that are readily accessible and where vehicle operation will not damage soil or vegetation; the boom will only be used for concentrated weed patches.

- Use hand applicators (backpacks or wipers) on small, scattered patches in rough terrain or environmentally sensitive areas.

- Dismiss the possibility of aerial herbicide applications for the present time; reconsider in the future as warranted.

- Monitor weather conditions during application periods to ensure effectiveness of the application and to reduce drift; spraying would cease when rainfall is expected within 24 hours, air temperatures exceed 85° F, or wind speeds exceed 8 mph.

- Design and adjust spray equipment to deliver a median drop diameter of 200-800 microns to reduce excessive drift.

- Conduct calibration checks at the beginning of the spraying season and periodically to ensure that equipment is functioning properly and that the desired applications rates are achieved, when feasible.

- Attempt to apply herbicides during the optimum stage of plant growth to achieve maximum effect using the least amount of herbicide; this is usually in the spring and/or fall when adequate soil moisture is available for plant growth and herbicide uptake.

- Mix a dye, when feasible, with the herbicide solution to aid in identifying where spraying has occurred in order to prevent "double-spraying" and to provide a means of checking coverage for monitoring purposes.

- Avoid applying picloram to dense stands of noxious weeds in sequential years to prevent overuse of a persistent chemical capable of leaching into groundwater.

- . Follow all herbicide label instructions, observing restrictions; additional precautions may also be taken.

2.4 Inventory and Monitoring Procedures

Prior to the preparation of this Plan, inventories were conducted during summer, 1994 and during previous years. Inventories consisted of field reconnaissance by FWP personnel or FWP contractors who noted the weed species present, location, approximate acreage, and its density. See Tables 1, 2, and 3 for a summary. Based on these reports, weed treatment activities are prioritized using the conceptual framework presented previously. Subsequently, work plans for

ATTACHMENT G

THOMPSON CHAIN OF LAKES MANAGEMENT PLAN AND ENVIRONMENTAL ASSESSMENT

THREATENED, ENDANGERED AND SENSITIVE SPECIES

NOVEMBER, 1993

Horseshoe lakes. Thompson Chain of Lakes also contains habitat amenable to goshawk, although no active goshawk nests have been identified in the area.

Wetland and Aquatic Wildlife Herpetological surveys have not been conducted in the Thompson Chain of Lakes area and the status and occurrence of most amphibians and reptiles of the area is unknown. Painted turtles, which have a localized distribution in Montana, are common along lakeshores in the Thompson Chain of Lakes. Few reptiles or amphibians were observed during field reconnaissance for this report.

Mammals including muskrats, mink, beavers, and raccoons can be found near wetland areas. The large number of old, abandoned lodges and dams, and small number of active sites, suggest that beaver populations may have declined significantly. Beaver populations are known to fluctuate naturally with available food supplies. Inactive beaver lodges, dams, and old "chew marks", estimated at 15 to 25 years old, are readily evident on most lakes including Cibid, Loon, and Lower Thompson where beaver are not now commonly sighted. A few trappers work the Thompson Chain of Lakes area.

Osprey nests are scattered throughout the Chain of Lakes, usually within a half mile of a lake. Some nests are in the vicinity of private homes and campsites, which others nests are far from human activity. Osprey nest in tall trees or snags. Fish are the most important component of their diet, and the birds may be an indication of the abundance or decline of native and other fish. Eight active osprey nests have been documented by consultants and by Montana Fish Wildlife and Parks. The birds are concentrated in the Thompson Lakes; six nests are clustered around Upper, Middle, and Lower Thompson Lakes.

Heron have maintained a rookery on Horseshoe Lake in the past. Although no active rookery is presently documented on the Thompson Chain of Lakes, the lakes provide suitable habitat for heron.

American bitterns, belted kingfishers, marsh wrens, swallows, and bald eagles are also associated with wetland environments. Kingfishers and bald eagles require perches on lakeshores, while marsh wrens and bitterns nest in wetlands.

Animal Species Threatened, Endangered, Sensitive or Requiring Supplemental Information Several threatened, endangered, and sensitive wildlife species live in or may pass through the Thompson Chain of Lakes area. The area is presently not included within the recovery zone of species other than the bald eagle. Figure 20 lists known species. A complete list of threatened endangered, and sensitive plants and animals of the Kootenai National Forest is available a Forest Service Headquarters.

Figure 20. Threatened, Endangered, or Sensitive Animals

COMMON NAME	*SCIENTIFIC NAME*	*USFWS*	*USFS*
Bald eagle	*Haliaetus leucocephalus*	*E*	*E*
Gray wolf	*Canus lupis*	*E*	*E*
Grizzly bear	*Ursus arctos*	*T*	*T*
Common loon	*Gavia immer*	-	*S*

Threatened and Endangered Species:

1. Bald Eagle. With coniferous forests surrounding deep-water lakes, the Thompson Chain of Lakes area provides excellent habitat for Bald Eagles. Eagles often nest in large trees near water. Fish, the staple of the bald eagle summer diet, are abundant in the Thompson Chain of Lakes. Bald eagles are presently listed as an endangered species by the U.S. Fish and Wildlife Service. There is a nest on Horseshoe lake which has been active for three years, and a possible nest has been noted at the east end of Lower Thompson Lake. Bald eagles are thought to have been more widely distributed in Montana prior to the 1950's and early 1960's when extensive use of chemical pesticides reduced populations in known distribution areas.

A pair of bald eagles began nesting on Horseshoe Lake in 1990. According to reports, they raised at least one, and possible two young in 1990 and two young in 1991; the nest failed in 1992. Water skiing, fishing, camping, and picnicking occur within 1/2 mile of this bald eagle nest. There is currently no management of recreational activities or timing of use to provide protection for the nesting pair of eagles. The bald eagle population in Montana has been increasing in recent years. There is a spatial requirement for nesting Bald Eagles, so a limited number of additional nests could be established in the Chain of Lakes area if the population continues to grow.

Potential nest sites in the Thompson Chain of Lakes area are limited by the availability of very large trees or snags for nests. Only a few other sites in the chain have the large nest tree component essential for bald eagle nesting territories.

Surveys of juvenile, subadult and adult eagles in the last ten years have counted between 2 and 20 birds. In the fall these birds eat kokanee, and in winter they feed on road kills, and fish-remains from ice fishermen.

2. Gray Wolf. Wolf packs are expanding south from Canada into northwestern Montana. Wolf sightings have occasionally been reported in recent years in and around the Thompson Chain of Lakes. The wolf population will likely increase throughout northwestern Montana in the future. Wolves depend on ungulates and small mammals for a food source. Wolf habitat requirement will be met if there is adequate habitat for their big game prey base. The greatest threat to wolves is illegal killing. Recreational activities such as camping and fishing do not significantly affect wolf recovery unless they should occur in or near wolf denning and rendezvous sites. Wolf recovery will be successful if a healthy prey base can be maintained and illegal human-caused mortalities are prevented.

3. Grizzly Bear. There have been occasional grizzly bear sightings in the vicinity of Thompson Chain of Lakes; however, TCL is not within a designated recovery area (Bear Management Unit). While the area could be used by a grizzly, the potential for bear/human interaction is high - making the area unsuitable for consideration as grizzly habitat.

Sensitive Species: Common Loons have been designated a "sensitive species" by the Montana Department of Fish, Wildlife and Parks. Nesting loons have established territories and have nested on some of the Thompson Lakes. Common loons nest in rushes and cattails along the shorelines of the lakes. Most lakes contain only one territorial pair. Current territories occur on Loon Lake, Upper Thompson Lake, and Middle Thompson Lake. Old nesting sites include Horseshoe Lake, Lower Thompson Lake, and McGregor Lake. Other lakes with potential for loons include Crystal Lake, Leon Lake, and Little McGregor. Reproduction is low, with only 1-2 pairs raising 1 or 2 chicks each year and other pairs not reproducing at all. Incubating loons are extremely sensitive to all human activity, including boating, fishing, and camping, within 150 yards of a nest. Educational materials on protecting loons have not been made available at campgrounds and boat ramps, and there are currently no restrictions on boating in nesting areas. The loon population is monitored annually by volunteers.

Species Requiring Supplemental Information: Great Blue Herons have been designated by the Montana Department of Fish, Wildlife and Parks as a "species requiring supplemental information" because of the heron's colonial nesting habits. Herons nest in colonies with several nests in each tree. They prefer to nest in a stand of large deciduous or ponderosa pine trees next to the edge of a body of water. There was an active heron rookery on Horseshoe Lake for many years that had up to 92 young birds and 32 active nests. The site was abandoned. Herons are still common in the Thompson Chain of Lakes and have probably established another rookery.

Air Quality

There are no significant air quality problem in the Thompson Chain of Lakes basin; hence, the issue of air quality has not been specifically addressed in the Thompson Chain of Lakes area. Partly because the area is sparsely inhabited, there is little concern at the present time about air quality. Particulate matter (dust) is of small concern because the region is heavily covered by vegetation. Smoke, especially that associated with woodstoves for heating, has had minimal impact because winter inhabitance of the area is presently low.

ATTACHMENT H

CLEARANCES

FEB 2 2 1995 Stan

Montana Department of Fish, Wildlife & Parks

1420 East Sixth Avenue
P.O. Box 200701
Helena, Montana 59620-0701

MAR 1995
F W & P REGION

RECEIVED
MAR 0 3 1995
DESIGN & CONSTRUCTION
DEPT. OF FISH, WILDLIFE & PARKS

FH
04
06

February 17, 1995

Marcella Sherfy
State Historic Preservation Officer
State Historic Preservation Office
1410 8th Avenue
P.O. Box 201202
Helena, Montana 59620-1202

Dear Marcella:

The Montana Department of Fish, Wildlife and Parks is proposing to use federal funds to develop five sites at the Thompson Chain of Lakes fishing access area. The proposed development will include access roads, boat ramps, latrines, paths, and parking. All these sites have been surveyed for cultural resources under the Thompson Chain of Lakes survey recently submitted to your office, with no cultural resources being found. Not only were these sites surveyed, all but Site 29 have been shovel tested (see attached report). The five sites proposed for development are as follows:

(1) Loon Lake Rec Site Number 11; shovel tested - 17 tests

(2) Horseshoe Lake Rec Site Number 16 & 16A; shovel tested - 29 at 16, 9 at 16A

(3) Upper Thompson Lake Rec Site Number 28 & 29; shovel tested - 15 at 28, none at 29

(4) Lower Thompson Lake Rec Site Number 42; shovel tested - 60 tests

(5) McGregor Lake Rec Site Number 3A; shovel tested - 11 tests

In addition to these five development sites, we are planning to place latrines at the following ten sites with state funds. All these locations were surveyed for cultural resources with no significant cultural resources being located. Also, many of these locations were shovel tested.

<u>Latrines Only</u>

(1) Little Loon Lake Rec Site Number 12; shovel tested - 16 tests

(2) Leon Lake Rec Site Number 13; shovel tested - 7 tests

(3) Horseshoe Lake Site Number 17A; shovel tested - 19 tests

(4) Centennial Acre Site Number 32; no shovel tests

(5) Middle Thompson Lake Site Number 45; no shovel tests

(6) Middle Thompson Lake Site Number 43; shovel tested - 33 tests (Note: This site is near cultural site 24LN1541, but shovel tests indicated no cultural site at Rec Site Number 43.)

(7) Lower Thompson Lake Rec Site Number 41B; shovel tested - 10 tests

(8) Lower Thompson Lake Rec Site Number 38 & 38A; no shovel tests

(9) Middle Thompson Lake Rec Site Number 36; shovel tested - 28 tests

(10) Little McGregor lake Rec Site Number 46; shovel tested - 13 tests

I have tried to put all the site shovel tests and development areas on one map (attached) to help clarify the locations per a discussion I had with Stan Wilmoth, but must admit because of the area involved and the number of shovel test sites, it is still a little confusing. The best way I found is to look at the Rec Site numbers on the report maps and the shovel test log pages 30-34 in the report. With regards to the site leads for the scarred trees, as they were not positively identified as sites, there must be some question in the surveyors' minds as to if they are cultural sites. We would like to have them verified before we record them as sites.

Based on the cultural resource survey and the extensive shovel testing, we believe there is little likelihood of these proposed projects impacting significant cultural resources. Please review the cultural resource survey and provide us with your comments.

Thank you for your time. Please call if you have any questions.

Sincerely,

Paul Valle

PAUL VALLE
Cultural Resources Coordinator
Design & Construction Bureau
Montana Fish, Wildlife and Parks

Attachment

CONCUR:
MONTANA SHPO
DATE 3-1-95 SIGNED

MONTANA ENVIRONMENTAL POLICY ACT (MEPA)/HB 495
TOURISM REPORT

The Montana Department of Fish, Wildlife and Parks has initiated the review process as mandated by HB 495 and the Montana Environmental Policy Act in its consideration of the project described below. As part of the review process, input and comments are being solicited. Please complete the project name and project description portions and submit this form to:

Clint Blackwood, Tourism Development Coordinator
Montana Promotion Division
Department of Commerce
1424 9th Avenue
Helena, MT 59620-0533

Project Name Thompson Chain of Lakes Inventory and Guidelines for Recreational Planni

Project Description Make site specific recommendations for recreational development and site and occupational density in Thompson Chain of Lakes

1. Would this site development project have a impact on the tourism economy?
   ☐ NO ☐ YES If YES, briefly describe:

2. Does this impending improvement alter the quality or quantity of recreation/tourism opportunities and settings?
   ☐ NO ☐ YES If YES, briefly describe:

Signature _____ Date _____

2/93